

Update Summary		
New Test Activation	11/28/2023	ARGAB - "Acetylcholine Receptor Ganglionic (Alpha 3) Ab"
New Test Activation	11/28/2023	CN1AG - "Cytosolic 5'-Nucleotidase 1A (cN-1A) Ab (IgG)"
New Test Activation	11/28/2023	DLAU - "D-Lactate, Urine"
New Test Activation	11/28/2023	FSSHN - "Fungal Stain, Calcofluor, Skin, Hair or Nails"
New Test Activation	11/28/2023	METQU - "Methaqualone, Serum/Plasma"
New Test Activation	11/28/2023	MGENR - "Mycoplasma genitalium, rRNA, TMA"
New Test Activation	11/28/2023	MOGAC - "MOG Antibody with Reflex to Titer, CSF"
New Test Activation	11/6/2023	OXYBU - "Oxybutynin and Metabolite, Urine"
New Test Activation	11/28/2023	TSHHT - "TSH with HAMA Treatment"
Update Existing Test	11/13/2023	11DCR - "11-Deoxycortisol"
Update Existing Test	11/13/2023	17OPC - "17-Hydroxyprogesterone, Child"
Update Existing Test	11/7/2023	AMA - "Anti-Mitochondrial Antibody"
Update Existing Test	11/7/2023	ATSHR - "TRAb (TSH Receptor Antibody)"
Update Existing Test	11/13/2023	BASPO - "Barbiturates, Serum or Plasma, Quantitative"
Update Existing Test	11/7/2023	BMDRP - "Borrelia miyamotoi DNA, Real-Time PCR Misc"
Update Existing Test	11/7/2023	CFBLD - "Culture, Fungus, Blood"
Update Existing Test	11/13/2023	CLOME - "Clobazam and Metabolite, Serum/Plasma"
Update Existing Test	11/7/2023	CUFUN - "Culture, Fungus, Skin, Hair or Nails"
Update Existing Test	11/7/2023	DL - "D-Lactate, Plasma"
Update Existing Test	11/7/2023	FNST - "Fungal Stain"
Update Existing Test	11/13/2023	FXRM1 - "Fragile X (FMR1) with Reflex to Methylation Analysis"
Update Existing Test	11/7/2023	GACAG - "Giardia and Cryptosporidium Ag Panel"
Update Existing Test	11/7/2023	NTBNP - "NT proBNP"
Update Existing Test	11/13/2023	TEFFC - "Testosterone Free, Females or Children"
Update Existing Test	11/7/2023	TESBQ - "Testosterone, Free, Bioavailable and Total, MS"
Update Existing Test	11/7/2023	TFTLC - "Testosterone, Free (Dialysis) and Total .LC/MS/MS"
Update Existing Test	11/13/2023	THCSQ - "THC Metabolite, Serum or Plasma, Quantitative"
Inactivate Test With Replacement	11/28/2023	1433P - "14-3-3 eta Protein" replaced by MCVAB - "Mutated Citrullinated Vimentin (MCV) Antibody"
Inactivate Test With Replacement	11/13/2023	BBCSF - "B. burgdorferi Abs (EIA), CSF" replaced by BBABC - "B. burgdorferi VlsE1/pepC10 Abs, CSF w Reflex"
Inactivate Test With Replacement	11/28/2023	COVW - "SARS-COV-2 Qualitative" replaced by CVPCR - "SAR-CoV-2 PCR"
Inactivate Test With Replacement	11/28/2023	CVD - "Comprehensive Virus Detection" replaced by CVP - "Comprehensive Virus Panel"

Inactivate Test With Replacement	11/13/2023	DPYD - "Dihydropyrimidine Dehydrogenase (DPYD), 3 Variants" replaced by DPYD3 - "Dihydropyrimidine Dehydrogenase (DPYD), 3 Variants"
Inactivate Test With Replacement	11/13/2023	F13AR - "Factor XIII, Qual w/1:1 Mix" replaced by F13RM - "Factor 13, Qual, Reflex to Factor 13 1:1 Mix "
Inactivate Test With Replacement	11/28/2023	HDMUT - "Huntington Disease Mutation" replaced by HDCAG - "Huntington Disease (HD) CAG Repeat Expansion"
Inactivate Test With Replacement	11/13/2023	IKVIE - "Zika Virus IgM Ab Capture (MAC), ELISA" replaced by ZVMAB - "Zika Virus IgM Ab Capture (MAC), ELISA"
Inactivate Test With Replacement	11/13/2023	JK12P - "JAK2 Exon 12 Mutation Analysis by PCR" replaced by JAK2P - "JAK2 Exon 12 Mutation Analysis by PCR"
Inactivate Test With Replacement	11/13/2023	PETWB - "Phosphatidylethanol (PEth), Whole Blood" replaced by PETHQ - "Phosphatidylethanol (PEth), WB, Quantitative"
Inactivate Test With Replacement	11/28/2023	RCVD - "Respiratory Comprehensive Virus Detection" replaced by RCVP - "Respiratory Comprehensive Virus Panel"
Inactivate Test With Replacement	11/28/2023	TCVD - "Tissue Comprehensive Virus Detection" replaced by TCVP - "Tissue Comprehensive Virus Panel"
Inactivate Test Without Replacement	11/28/2023	B12BC - "Vitamin B12 Binding Capacity"
Inactivate Test Without Replacement	11/13/2023	INFAG - "Influenza A Virus Ab, IgG"
Inactivate Test Without Replacement	11/13/2023	INFBG - "Influenza B Virus Ab, IgG"
Inactivate Test Without Replacement	11/7/2023	MAYFL - "Mayfly (Ephemeroptera) IgE"

New Test Activation

Effective Date	11/28/2023
Name	Acetylcholine Receptor Ganglionic (Alpha 3) Ab
Code	ARGAB
CPT Code(s)	83519
Notes	Activate new test New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	Collect: Serum separator tube (SST) Specimen Preparation: Centrifuge, separate serum from cells and send 1.0 mL serum in a screw capped plastic vial. Minimum Volume: 0.5 mL Transport Temperature: Frozen
Alternate Specimen	Red top
Rejection Criteria	Plasma
Stability	Room temperature: 48 hours Refrigerated: 48 hours Frozen: 75 days

Performing Information

Methodology	Radioimmunoassay (RIA)
Reference Range	Negative: <55 pmol/L Borderline: 55 - 160 pmol/L Positive: >160 pmol/L
Performed Days	Monday, Wednesday
Turnaround Time	9 - 16 days
Performing Laboratory	Quest SJC

Interface Information

Legacy Code¹	ARGAB		
Interface Order Code	3400786		
Result Code	Name	LOINC Code	AOE/Prompt²
3400786	Acetylcholine Receptor Ganglionic (Alpha 3) Ab	42233-7	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:38 Received: 10/20/2023 11:38

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Acetylcholine Receptor Ganglionic (Alpha 3) Ab	<55		<55	pmol/L	QCRL

Reference Ranges for
Acetylcholine Receptor
Ganglionic Antibody:

Negative: <55 pmol/L
Borderline: 55-160 pmol/L
Positive: >160 pmol/L

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute San Juan Capistrano. It has not been cleared or approved by FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Test Performed at:
Quest Diagnostics Nichols Institute
33608 Ortega Highway

Reported Date: 2023.10.20 11:38

Performing Site:

QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000003
WX0000003827

Printed D&T: 10/20/23 11:38

Ordered By: KAJAL SITWALA, MD, PhD
WX000000000002365

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

New Test Activation

Effective Date	11/28/2023
Name	Cytosolic 5'-Nucleotidase 1A (cN-1A) Ab (IgG)
Code	CN1AG
CPT Code(s)	83516
Notes	New test activation New York DOH Approved Status: Yes

Specimen Requirements

Specimen Required	Collect: Serum separator tube (SST) Specimen Preparation: Centrifuge, separate serum from cells and send 0.5 mL serum in a screw capped plastic vial. Minimum Volume: 0.3 mL Transport Temperature: Room temperature
Alternate Specimen	Plasma: Lavender EDTA
Rejection Criteria	Moderate to gross hemolysis
Stability	Room temperature: 7 days Refrigerated: 14 days Frozen: 28 days

Performing Information

Methodology	Enzyme-linked Immunosorbent Assay (ELISA)
Reference Range	<15 Units: Negative 15 - 19 Units: Borderline ≥20 Units: Positive
Performed Days	Tuesday, Thursday, Saturday
Turnaround Time	4 - 7 days
Performing Laboratory	Quest SJC

Interface Information

Legacy Code ¹	CN1AG		
Interface Order Code	3400784		
Result Code	Name	LOINC Code	AOE/Prompt ²
3400784	Cytosolic 5'-Nucleotidase 1A (cN-1A) Ab (IgG)	94097-3	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W

WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/20/2023 11:40

Received: 10/20/2023 11:40

Test Name	Result	Flag	Ref-Ranges	Units	Site
Cytosolic 5'-Nucleotidase 1A (cN-1A) Ab (IgG)	14			Units	QCRL

Reference Range:

<15: NEGATIVE
15-19: BORDERLINE
> OR = 20: POSITIVE

The cN-1A Ab assay is a useful aid for the diagnosis of inclusion body myositis (IBM). The analytical sensitivity of this assay is 35-70%, based on published reports. In our internal validation study with 120 healthy adult subjects, 1.7% had a positive cN-1A Ab result and 6.7% had an equivocal result. However, published reports and our own internal studies suggest that patients with Sjogren's syndrome, systemic lupus erythematosus, dermatomyositis (DM), or polymyositis (PM), are significantly more likely to have a positive cN-1A Ab result. In contrast, patients presenting clinically with IBM rarely produce autoantibodies associated with a diagnosis of DM or PM. Therefore, cN-1A Ab results must be interpreted in context with other details of the patient's clinical evaluation.

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute San Juan Capistrano. It has not been cleared or approved by FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Test Performed at:

Quest Diagnostics Nichols Institute
33608 Ortega Highway

Reported Date: 2023.10.20 11:40

Performing Site:

QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000004
WX0000003826

Printed D&T: 10/20/23 11:40

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

New Test Activation

Effective Date	11/28/2023
Name	D-Lactate, Urine
Code	DLAU
CPT Code(s)	83605
Notes	New test activation New York DOH Approval Status: No

Specimen Requirements

Specimen Required	<i>Patient Preparation:</i> Biochemical Genetics Patient Information form required. <i>Collect:</i> Random urine <i>Specimen Preparation:</i> send 0.5 mL urine in a screw capped plastic urine cup. No preservative. Frozen. <i>Minimum Volume:</i> 0.15 mL <i>Transport Temperature:</i> Frozen
Alternate Specimen	24 hour urine
Rejection Criteria	Urine collected with preservative
Stability	Room temperature: 90 days Refrigerated: 90 days Frozen: 90 days

Performing Information

Methodology	Gas Chromatography-Mass Spectrometry (GCMS) Stable Isotope Dilution Analysis
Reference Range	0.0 - 0.25 mmol/L
Performed Days	Monday, Thursday
Turnaround Time	5 - 8 days
Performing Laboratory	Mayo Clinic Laboratories

Interface Information

Interface Information			
Legacy Code ¹	DLAU		
Interface Order Code	3800338		
Result Code	Name	LOINC Code	AOE/Prompt ²
3800338	D-Lactate, Urine	14046-7	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:37 Received: 10/20/2023 11:37

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
D-Lactate, Urine	0.15		0.0-0.25	mmol/L	MMRL

-----ADDITIONAL INFORMATION-----

Gas Chromatography-Mass Spectrometry (GC-MS) Stable Isotope
Dilution Analysis

This test was developed and its performance characteristics
determined by Mayo Clinic in a manner consistent with CLIA
requirements. This test has not been cleared or approved by
the U.S. Food and Drug Administration.

Test Performed by:

Mayo Clinic Laboratories - Rochester Main Campus

200 First Street SW, Rochester, MN 55905

Lab Director: William G. Morice M.D. Ph.D.; CLIA# 24D0404292

Reported Date: 2023.10.20 11:37

Performing Site:

MMRL: MAYO MEDICAL REFERENCE LAB 3050 Superior Drive NW Rochester MN 55901

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000002
WX0000003827

Printed D&T: 10/20/23 11:37

Ordered By: KAJAL SITWALA, MD, PhD
WX000000000002365

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

New Test Activation			
Effective Date	11/28/2023		
Name	Fungal Stain, Calcofluor, Skin, Hair or Nails		
Code	FSSHN		
CPT Code(s)	87220		
Notes	New Test Activation New York DOH Approval Status: Yes		
Specimen Requirements			
Specimen Required	Collect: Skin, hair or nails Specimen Preparation: Skin, hair or nails collected in a sterile leak-proof container. Remove hairs with forceps, scrape skin or scalp scales, clip nails and include keratin scrapings. Cleanse skin with alcohol before scraping. Cleanse feet and hands before collecting nails. Refrigeration can inhibit dermatophytes. Transport Temperature: Room temperature		
	Stability Room temperature: 7 days Refrigerated: Unacceptable Frozen: Unacceptable		
Performing Information			
Methodology	Calcofluor White Stain		
Reference Range	See report		
Performed Days	Sunday - Saturday		
Turnaround Time	3 - 5 days		
Performing Laboratory	Quest SJC		
Interface Information			
Legacy Code ¹	FSSHN		
Interface Order Code	3400763		
Result Code	Name	LOINC Code	AOE/Prompt ²
3400764	Specimen Source:	31208-2	Yes
3400765	Fungal Stain SHN	21003-9	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/25/2023 11:12 Received: 10/25/2023 11:12

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Fungal Stain, Calcofluor, Skin, Hair or Nails					
Specimen Source:	NAILS				QCRL
Fungal Stain SHN	NO FUNGAL ELEMENTS SEEN		Reported Date: 10/25/2023	-:1	QCRL

Test Performed at:
Quest Diagnostics Nichols Institute
33608 Ortega Highway
San Juan Capistrano, CA 92675-2042

Reported Date: 10/25/2023 11:12 FSSHN

Performing Site:

QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F425000002
WX0000003826

Printed D&T: 10/25/23 11:12

Ordered By: KAJAL SITWALA, MD, PhD
WX000000000002353

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

New Test Activation

Effective Date	11/28/2023
Name	Methaqualone, Serum/Plasma
Code	METQU
CPT Code(s)	80368 (G0480)
Notes	Activate new test New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	Collect: Red top Specimen Preparation: Centrifuge, separate serum from cells immediately. Send 2.0 mL serum in a screw capped plastic vial. Minimum Volume: 0.7 mL Transport Temperature: Refrigerated
Alternate Specimen	Plasma: EDTA
Rejection Criteria	Serum separator tube (SST), Plasma separation tube (PST)
Stability	Room temperature: 7 days Refrigerated: 14 days Frozen: 1 year

Performing Information

Methodology	Gas Chromatography/Mass Spectrometry (GCMS)
Reference Range	See report
Performed Days	Varies
Turnaround Time	9 - 11 days
Performing Laboratory	NMS Labs

Interface Information

Legacy Code¹	METQU		
Interface Order Code	3300319		
Result Code	Name	LOINC Code	AOE/Prompt²
3300319	Methaqualone, Serum/Plasma	3785-3	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:35 Received: 10/20/2023 11:35

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Methaqualone, Serum/Plasma	10			mcg/mL	NMRL

Reporting Limit: 0.10 mcg/mL
Synonym(s): Quaalude (R)
Reported blood levels associated with:
Erratic driving: 2-12 mcg/mL
Mild Toxicity: 2-16 mcg/mL
Unconsciousness: Greater than 8 mcg/mL
Analysis by Gas Chromatography/Mass Spectrometry
(GC/MS)
This test was developed and its performance
characteristics determined by NMS Labs. It has not
been cleared or approved by the US Food and Drug
Administration.

Testing performed at NMS Labs, Inc.
200 Welsh Road
Horsham, PA 19044-2208
CLIA 39D0197898

Reported Date: 2023.10.20 11:35

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000001
WX0000003827
Printed D&T: 10/20/23 11:36

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 1

New Test Activation			
Effective Date	11/28/2023		
Name	Mycoplasma genitalium, rRNA, TMA		
Code	MGENR		
CPT Code(s)	87563		
Notes	New test activation		
Specimen Requirements			
Specimen Required	Collect: Swab Specimen Preparation: Endocervical or male urethral swab collected in an Aptima® Unisex Swab Specimen Collection kit Or Vaginal or penile metal swab in Aptima® Multitest swab specimen collection kit. Transport Temperature: Room temperature		
Alternate Specimen	Urine 2.0 mL male or female urine collected in an Aptima® Urine Collection Kit. Minimum Volume: 2.0 mL		
Rejection Criteria	Transport tube with 2 swabs Transport tubes with non-aptima® swabs Swab transport tubes with no swab Swab submitted in non-Aptima® transport containers Urine sample where fluid level is not between the black fill lines Urine submitted in non-Aptima® transport containers		
Stability	Swabs: Room temperature: 60 days Refrigerated: 60 days Frozen: 90 days Urine: Room temperature: 30 days Refrigerated: 30 days Frozen: 90 days		
Performing Information			
Methodology	Transcription-Mediated Amplification (TMA)		
Reference Range	Not detected		
Performed Days	Monday - Saturday		
Turnaround Time	5 - 7 days		
Performing Laboratory	Quest SJC		
Interface Information			
Legacy Code ¹	MGENR		
Interface Order Code	3400808		
Result Code	Name	LOINC Code	AOE/Prompt ²
3400808	Mycoplasma genitalium, rRNA, TMA	100706-1	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:42 Received: 10/20/2023 11:42

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Mycoplasma genitalium, rRNA, TMA	NOT DETECTED				QCRL

REFERENCE RANGE: NOT DETECTED

Test Performed at:
Quest Diagnostics Nichols Institute
33608 Ortega Highway

Reported Date: 2023.10.20 11:42

Performing Site:

QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000006
WX0000003827

Printed D&T: 10/20/23 11:43

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

New Test Activation			
Effective Date	11/28/2023		
Name	MOG Antibody with Reflex to Titer, CSF		
Code	MOGAC		
CPT Code(s)	86362		
Notes	New test activation New York DOH Approval Status: Yes		
Specimen Requirements			
Specimen Required	Collect: Cerebrospinal Fluid (CSF) Specimen Preparation: Collect Cerebrospinal fluid (CSF) and send 2.0 mL fluid in a screw capped plastic vial. Minimum Volume: 0.5 mL Transport Temperature: Refrigerated		
Rejection Criteria	Visible particulate matter		
Stability	Room temperature: 7 days Refrigerated: 14 days Frozen: 21 days		
Performing Information			
Methodology	Cell-based Immunofluorescence Assay		
Reference Range	MOG Ab CBA, CSF: Negative MOG Ab Titer, CSF: <1:2 titer		
Performed Days	Wednesday		
Turnaround Time	5 - 9 days		
Performing Laboratory	Quest SJC		
Interface Information			
Legacy Code ¹	MOGAC		
Interface Order Code	3400787		
Result Code	Name	LOINC Code	AOE/Prompt ²
3400788	MOG Ab CBA, CSF	91543-9	No
3400789	MOG Ab Titer, CSF	91542-1	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:44 Received: 10/20/2023 11:44

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
MOG Antibody with Reflex to Titer, CSF					
MOG Ab CBA, CSF	POSITIVE	AB	NEGATIVE		QCRL

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute San Juan Capistrano. It has not been cleared or approved by FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Test Performed at:
Quest Diagnostics Nichols Institute
33608 Ortega Highway

		Reported Date: 2023.10.20	-:1		
MOG Ab Titer, CSF	1:16	H	<1:2	titer	QCRL

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute San Juan Capistrano. It has not been cleared or approved by FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Test Performed at:
Quest Diagnostics Nichols Institute
33608 Ortega Highway

Reported Date: 2023.10.20 11:44 **MOGAC**

Performing Site:

QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000007
WX0000003827

Printed D&T: 10/20/23 11:45

Ordered By: KAJAL SITWALA, MD, PhD
WX000000000002365

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

New Test Activation

Effective Date	11/6/2023
Name	Oxybutynin and Metabolite, Urine
Code	OXYBU
CPT Code(s)	80375
Notes	Activate new test New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	Collect: Random urine Specimen Preparation: Send 2.0 mL random urine in a sterile, screw capped plastic container. Minimum Volume: 1.0 mL Transport Temperature: Refrigerated
Rejection Criteria	Room temperature specimen Specimen collected in preservative
Stability	Room temperature: 24 hours Refrigerated: 30 days Frozen: 30 days

Performing Information

Methodology	Liquid Chromatography/Tandem Mass Spectrometry
Reference Range	See report
Performed Days	Varies
Turnaround Time	9 -10 days
Performing Laboratory	NMS Labs

Interface Information

Legacy Code¹	OXYBU		
Interface Order Code	3300316		
Result Code	Name	LOINC Code	AOE/Prompt²
3300317	Oxybutynin		No
3300318	Desethyl Oxybutynin		No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:52 Received: 10/20/2023 11:52

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Oxybutynin, Urine					
Oxybutynin	1.0			ng/mL	NMRL

Reporting Limit: 0.50 ng/mL
Synonym(s): Ditropan(R)
Analysis by High Performance Liquid Chromatography/
Tandem Mass Spectrometry (LC-MS/MS)

Reported Date: 2023.10.20 -1
ng/mL NMRL

Desethyl Oxybutynin 2.0

Reporting Limit: 0.50 ng/mL
Desethyl oxybutynin is an oxybutynin
metabolite.
Analysis by High Performance Liquid Chromatography/
Tandem Mass Spectrometry (LC-MS/MS)
This test was developed and its performance
characteristics determined by NMS Labs. It has not
been cleared or approved by the US Food and Drug
Administration.

Testing performed at NMS Labs, Inc.
200 Welsh Road
Horsham, PA 19044-2208
CLIA 39D0197898

Reported Date: 2023.10.20 11:52 OXYBU

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000009 Ordered By: KAJAL SITWALA, MD, PhD
WX0000003827 WX000000000002365
Printed D&T: 10/20/23 11:52

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 1

New Test Activation

Effective Date	11/28/2023
Name	TSH with HAMA Treatment
Code	TSHHT
CPT Code(s)	84443 x 2
Notes	Activate new test New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	<i>Patient Preparation:</i> Specimen collection after fluorescein dye angiography should be delayed for at least 3 days. For patients on hemodialysis, specimen collection should be delayed for 2 weeks. <i>Collect:</i> Red top <i>Specimen Preparation:</i> Centrifuge, separate serum from cells and send 2.0 mL serum in a screw capped plastic vial. <i>Minimum Volume:</i> 1.5 mL <i>Transport Temperature:</i> Refrigerated
Rejection Criteria	Serum separator tube (SST)
Stability	Room temperature: 7 days Refrigerated: 7 days Frozen: 28 days

Performing Information

Methodology	Immunoassay
Reference Range	See report
Performed Days	Tuesday - Saturday
Turnaround Time	4 - 6 days
Performing Laboratory	Quest SJC

Interface Information

Legacy Code ¹	TSHHT		
Interface Order Code	3400781		
Result Code	Name	LOINC Code	AOE/Prompt ²
3400782	TSH, HAMA Treated	3016-3	No
3400783	TSH, Untreated	3016-3	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W

WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/20/2023 11:41

Received: 10/20/2023 11:41

Test Name	Result	Flag	Ref-Ranges	Units	Site
TSH with HAMA Treatment					
TSH, HAMA Treated	0.41		SEE BELOW	mIU/L	QCRL
Reported Date: 2023.10.20					
TSH, Untreated	1.00		0.40-4.50	mIU/L	QCRL

Female Reference Ranges for TSH:

Premature Infants, (28-36) weeks
1st week of life 0.20-27.90 mIU/L

Term infants, (>37 weeks)
Serum or Cord Blood 1.00-39.00 mIU/L

1-2 days 3.20-34.60 mIU/L
3-4 days 0.70-15.40 mIU/L
5 days-4 weeks 1.70-9.10 mIU/L**
1-11 months 0.80-8.20 mIU/L
1-19 years 0.50-4.30 mIU/L
> or = 20 years 0.40-4.50 mIU/L

** TSH levels decline rapidly during the first week of life in most children, but may remain transiently elevated in a few individuals despite normal free T4 levels. For proper interpretation of an abnormal TSH from a newborn thyroid screen, a Free T4 by Dialysis (TC 35167) or T4, Total (Thyroxine) (TC 17733) should be considered.

Pregnancy Ranges

First Trimester 0.26-2.66 mIU/L
Second Trimester 0.55-2.73 mIU/L
Third Trimester 0.43-2.91 mIU/L

For additional information, please refer to <http://education.QuestDiagnostics.com/faq/FAQ138>
(This link is being provided for informational/educational purposes only.)

Test Performed at:
Quest Diagnostics Nichols Institute
33608 Ortega Highway

Reported Date: 2023.10.20 11:41 TSHHT

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000005
WX0000003826
Printed D&T: 10/20/23 11:42

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 2



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W

WX0000003826 F 12/05/1988 34 Y

Performing Site:
QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000005
WX0000003826

Printed D&T: 10/20/23 11:42

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 2 OF 2

Update Existing Test

Effective Date	11/13/2023
Name	11-Deoxycortisol
Code	11DCR
Interface Order Code	3687960
Legacy Code	11DCOR
Notes	Changes to Turnaround Time.

Required Testing Changes

Turnaround Time	3 - 10 days
-----------------	-------------

Update Existing Test

Effective Date	11/13/2023
Name	17-Hydroxyprogesterone, Child
Code	17OPC
Interface Order Code	3670200
Legacy Code	17OPROGARP
Notes	Changes to Transport Temperature, Stability, Rejection Criteria

Required Testing Changes

Specimen Required	<i>Collect:</i> Serum separator tube (SST) <i>Specimen Preparation:</i> Centrifuge, separate serum from cells within 2 hours and send 1.0 mL in a screw capped plastic vial. <i>Minimum Volume:</i> 0.3 mL <i>Transport Temperature:</i> Frozen
Rejection Criteria	Grossly hemolyzed specimens
Stability	After separation from cells: Room temperature: 3 days Refrigerated: 7 days Frozen: 6 months

Update Existing Test

Effective Date	11/7/2023
Name	Anti-Mitochondrial Antibody
Code	AMA
Interface Order Code	3002220
Legacy Code	AMA
Notes	Update to rejection criteria.

Required Testing Changes

Rejection Criteria	Samples other than serum or EDTA plasma, hemolysis, lipemia, microbially contaminated samples
--------------------	---

Update Existing Test

Effective Date	11/7/2023
Name	TRAb (TSH Receptor Antibody)
Code	ATSHR
Interface Order Code	3000316
Legacy Code	ATSHR
Notes	Changes to Rejection Criteria

Required Testing Changes

Rejection Criteria	Heat-inactivated sample; samples stabilized with azide; specimens other than serum
--------------------	--

Update Existing Test

Effective Date	11/13/2023
Name	Barbiturates, Serum or Plasma, Quantitative
Code	BASPQ
Interface Order Code	3600586
Legacy Code	BASPQ
Notes	Change to Turnaround Time.

Required Testing Changes

Turnaround Time	3 - 9 days
-----------------	------------

Update Existing Test

Effective Date	11/7/2023
Name	Borrelia miyamotoi DNA, Real-Time PCR Misc
Code	BMDRP
Interface Order Code	3400687
Legacy Code	BMDRP
Notes	Changes to Interface Order Code

Required Testing Changes

Interface Order Code	3400687
----------------------	---------

Update Existing Test

Effective Date	11/7/2023
Name	Culture, Fungus, Blood
Code	CFBLD
Interface Order Code	3400724
Legacy Code	CFBLD
Notes	Changes to Alternate Specimen, Rejection Criteria

Required Testing Changes

Alternate Specimen	Bone marrow in BACTEM™ Myco
Rejection Criteria	Specimen in lavender EDTA tube, specimen in heparin green top tube, specimens in citrate, ACD. Received frozen, BACTEC Plus Aerobic/F bottle, BACTEC Lytic/10 Anaerobic/F bottle, BACTEC Peds bottle

Update Existing Test

Effective Date	11/13/2023
Name	Clobazam and Metabolite, Serum/Plasma
Code	CLOME
Interface Order Code	3300192
Legacy Code	CLOME
Notes	Changes to Turnaround Time

Required Testing Changes

Turnaround Time	3 - 8 days
------------------------	------------

Update Existing Test

Effective Date	11/7/2023
Name	Culture, Fungus, Skin, Hair or Nails
Code	CUFUN
Interface Order Code	3700499
Legacy Code	CUFUN
Notes	Changes to Specimen Preparation, stability, Rejection Criteria

Required Testing Changes

Specimen Required	<p><i>Collect:</i> Skin, Hair or nails</p> <p><i>Specimen Preparation:</i> Remove hairs with forceps, scrape skin or scalp scales, clip nails and include keratin scrapings. Cleanse skin with alcohol before scraping. Cleanse feet and hands before collecting nails. Refrigeration is not recommended because it can inhibit dermatophytes.</p> <p><i>Minimum Volume:</i> No minimum volume</p> <p><i>Transport Temperature:</i> Room temperature</p>
Rejection Criteria	No rejection criteria
Stability	<p>Hair, skin and nail specimens:</p> <p>Room temperature: 14 days</p> <p>Refrigerated: Unacceptable</p> <p>Frozen: Unacceptable</p> <p>Transport swabs:</p> <p>Room temperature: 72 hours</p> <p>Refrigerated: Unacceptable</p> <p>Frozen: Unacceptable</p>

Update Existing Test

Effective Date	11/7/2023
Name	D-Lactate, Plasma
Code	DL
Interface Order Code	3501180
Legacy Code	DL
Notes	Changes to Specimen Preparation, Minimum Volume, Alternate Specimen, Stability, Methodology, Turnaround Time, Performed Days <i>New York DOH Approval Status: Yes</i>

Required Testing Changes

Specimen Required	<i>Collected:</i> Gray sodium fluoride/potassium oxalate <i>Specimen Preparation:</i> Centrifuge, separate, and send 0.5 mL plasma in a screw capped plastic vial. If collecting in sodium heparin tube, centrifuge within one hour. <i>Minimum Volume:</i> 0.2 mL <i>Transport Temperature:</i> Frozen
Alternate Specimen	Plasma: Green sodium heparin
Stability	Room temperature: 91 days Refrigerated: 91 days Frozen: 91 days
Methodology	Gas Chromatography-Mass Spectrometry (GCMS) Stable Isotope Dilution Analysis
Performed Days	Monday, Thursday
Turnaround Time	5 - 8 days

Update Existing Test

Effective Date	11/7/2023
Name	Fungal Stain
Code	FNST
Interface Order Code	3700031
Legacy Code	FNST
Notes	Changes to CPT4 Code(s), Specimen Required, Alternate Specimen, Stability, Rejection Criteria, Methodology, Turnaround Time <i>New York DOH Approval Status: Yes</i>

Required Testing Changes

CPT Code(s)	87206
Specimen Required	<i>Collect: Body fluid, lower respiratory tract specimens, urine or tissue</i> <i>Specimen Preparation: Send 3.0 mL or 3.0 grams body fluids, lower respiratory tract specimens, urine or fresh (unfixed) tissue collected in sterile, leak-proof container.</i> <i>Minimum Volume: 1.0 mL or 1 g, 1 swab</i> <i>Transport Temperature: Refrigerated</i>
Alternate Specimen	1.0 mL or 1 swab wood, exudates, aspirates, lesion material, ocular specimens collected in a sterile, leak-proof container, Amies liquid or gel swab system or Stuarts or ESwab
Rejection Criteria	Whole blood Stool
Stability	Room temperature: 72 hours Refrigerated: 72 hours Frozen: Unacceptable
Methodology	Calcofluor White Stain
Turnaround Time	3 - 5 days

Update Existing Test

Effective Date	11/13/2023
Name	Fragile X (FMR1) with Reflex to Methylation Analysis
Code	FXRM1
Interface Order Code	3600211
Legacy Code	FXRM1
Notes	Changes to Specimen Required, Alternative Specimen, and Performed Days

Required Testing Changes

Specimen Required	<i>Collect: Lavender EDTA</i> <i>Specimen Preparation: Send 2.0 mL whole blood</i> <i>Minimum Volume: 1.0 mL</i> <i>Transport Temperature: Refrigerated</i> <i>New York DOH Approval Status: Yes</i>
Alternate Specimen	Whole blood: Yellow ACD A
Performed Days	Varies

Update Existing Test

Effective Date	11/7/2023
Name	Giardia and Cryptosporidium Ag Panel
Code	GACAG
Interface Order Code	3400658
Legacy Code	GACAG
Notes	Changes to stability

Required Testing Changes

Stability	<p>Total-Fix transport vial: Room temperature: 14 days Refrigerated: Unacceptable Frozen: Unacceptable</p> <p>10% Formalin: Room temperature: 60 days Refrigerated: Unacceptable Frozen: Unacceptable</p>
-----------	---

Update Existing Test

Effective Date	11/7/2023
Name	NT proBNP
Code	NTBNP
Interface Order Code	3000317
Legacy Code	NTBNP
Notes	Changes to rejection criteria.

Required Testing Changes

Rejection Criteria	Heat-inactivated samples; Samples stabilized with sodium azide
--------------------	--

Update Existing Test

Effective Date	11/13/2023
Name	Testosterone Free, Females or Children
Code	TEFFC
Interface Order Code	3600009
Legacy Code	TEFFC
Notes	Change to Turnaround Time.

Required Testing Changes

Turnaround Time	3 - 7 days
-----------------	------------

Update Existing Test

Effective Date	11/7/2023
Name	Testosterone, Free, Bioavailable and Total, MS
Code	TESBQ
Interface Order Code	3422000
Legacy Code	TESFBTQ
Notes	Changes to Specimen Preparation, Minimum Volume

Required Testing Changes

Specimen Required	<p>Collect: Red top</p> <p>Specimen Preparation: Centrifuge, separate serum from cells and send 4.0 mL serum in a screw capped plastic vial.</p> <p>Minimum Volume: 3.0 mL</p> <p>Transport Temperature: Refrigerated</p>
-------------------	---

Update Existing Test

Effective Date	11/7/2023
Name	Testosterone, Free (Dialysis) and Total .LC/MS/MS
Code	TFTLC
Interface Order Code	3723600
Legacy Code	TFTLC
Notes	Change to Performing Location

Required Testing Changes

Performing Laboratory	Quest SJC
-----------------------	-----------

Update Existing Test

Effective Date	11/13/2023
Name	THC Metabolite, Serum or Plasma, Quantitative
Code	THCSQ
Interface Order Code	3600024
Legacy Code	THCSQ
Notes	Changes to Performed Days and Turnaround Time.

Required Testing Changes

Performed Days	Sunday, Tuesday, Thursday, Friday
Turnaround Time	3 - 7 days

Inactivate Test With Replacement

Effective Date 11/28/2023

Inactivated Test

Name 14-3-3 eta Protein
Code 1433P
Legacy Code¹ 1433P
Interface Order Code 3427700
Notes Inactivate test with replacement MCVAB

Replacement Test

Name Mutated Citrullinated Vimentin (MCV) Antibody
Code MCVAB
CPT Code(s) 83520
Notes Inactivate 1433P and activating MCVAB as the replacement
New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required *Collect: Red top
Specimen Preparation: Centrifuge, separate serum from cells and send 1.0 mL serum in a screw capped plastic vial.
Minimum Volume: 0.5 mL
Transport Temperature: Refrigerated*

Alternate Specimen Serum separator tube (SST)

Stability Room temperature: 7 days
Refrigerated: 14 days
Frozen: 6 months

Performing Information

Methodology Enzyme-linked Immunosorbent Assay (ELISA)
Reference Range <20 U/mL
Performed Days Sunday - Saturday
Turnaround Time 3 - 5 days
Performing Laboratory Quest SJC

Interface Information

Legacy Code¹ MCVAB
Interface Order Code 3400809

Result Code	Name	LOINC Code	AOE/Prompt ²
3400809	Mutated Citrullinated Vimentin (MCV) Antibody		No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:46 Received: 10/20/2023 11:46

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Mutated Citrullinated Vimentin (MCV) Antibody	<20		<20	U/mL	QCRL

Anti-mutated citrullinated vimentin antibody may be used as a second-line marker of rheumatoid arthritis, in addition to rheumatoid factor and anti-cyclic citrullinated peptide (CCP).

Test Performed at:
Quest Diagnostics Nichols Institute
33608 Ortega Highway

Reported Date: 2023.10.20 11:46

Performing Site:

QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000008
WX0000003827

Printed D&T: 10/20/23 11:47

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

Inactivate Test With Replacement

Effective Date 11/13/2023

Inactivated Test

Name B. burgdorferi Abs (EIA), CSF
Code BBCSF
Legacy Code¹ BBCSF
Interface Order Code 3620860

Replacement Test

Name B. burgdorferi VlsE1/pepC10 Abs, CSF w Reflex
Code BBABC
CPT Code(s) 86618; plus 86617 x 2, if reflexed, at additional cost
Notes New York DOH Approval Status: No

Specimen Requirements

Specimen Required Collect: Cerebrospinal fluid (CSF)
Specimen Collection: Send 6.0 mL cerebrospinal fluid (CSF) in a screw capped plastic vial.
Minimum Volume: 2.5 mL
Transport Temperature: Refrigerated

Rejection Criteria Bacterially contaminated, heat-inactivated, hemolyzed, or xanthochromic specimens

Stability Room temperature: 8 hours
Refrigerated: 14 days
Frozen: 1 month (Avoid repeated freeze thaw cycles)

Performing Information

Methodology Semi-quantitative Enzyme-Linked Immunosorbent Assay/Qualitative Immunoblot
Reference Range See report
Performed Days Sunday - Saturday
Turnaround Time 3 - 6 days
Performing Laboratory ARUP Reference Laboratory

Interface Information

Legacy Code¹ BBABC
Interface Order Code 3600329

Result Code	Name	LOINC Code	AOE/Prompt ²
3600331	B. burgdorferi VlsE1/pepC10 Abs, CSF		No
3600332	Borrelia burgdorferi Ab, IgM, IB (CSF)	13203-5	No
3600333	Borrelia burgdorferi Ab, IgG, IB (CSF)	13202-7	No
3600334	Lyme Standard 2-Tier Testing, CSF Interp		No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/20/2023 11:56 Received: 10/20/2023 11:56

Test Name	Result	Flag	Ref-Ranges	Units	Site
B. burgdorferi VlsE1/pepC10 Abs, CSF w Reflex					
B. burgdorferi VlsE1/pepC10 Abs, CSF	6.50	H	<=0.90	IV	ARRL

REFERENCE INTERVAL: B. burgdorferi VlsE1/pepC10 Abs, CSF

0.90 IV or less Negative - VlsE1 and pepC10
antibodies to B. burgdorferi not
detected.
0.91-1.09 IV Equivocal - Repeat testing in
10-14 days may be helpful.
1.10 IV or greater Positive - VlsE1 and pepC10
antibodies to B. burgdorferi
detected.

The detection of antibodies to Borrelia burgdorferi in
cerebrospinal fluid may indicate central nervous system
infection. However, consideration must be given to possible
contamination by blood or transfer of serum antibodies
across the blood-brain barrier. Lyme disease diagnosis in
serum is recommended prior to any CSF studies.

This test was developed and its performance characteristics
determined by ARUP Laboratories. It has not been cleared or
approved by the US Food and Drug Administration. This test
was performed in a CLIA certified laboratory and is
intended for clinical purposes.

Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Jonathan R. Genzen, MD, PhD
CLIA Number: 46D0523979

Borrelia burgdorferi Ab, IgM, IB (CSF)	Positive	Reported Date: 2023.10.20	-:1	ARRL
		AB Negative		

INTERPRETIVE INFORMATION: Borrelia burgdorferi Ab, IgM,
IB (CSF)

For this assay, a positive result is reported when any 2 or
more of the following bands are present: 23, 39, 41 kDa.
All other banding patterns are reported as negative.

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000012 Ordered By: KAJAL SITWALA, MD, PhD
WX0000003826 WX00000000002353
Printed D&T: 10/20/23 11:58

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 3

Example Client, XYZ123
 1234 Warde Road
 Ann Arbor MI 48108

EXAMPLE, REPORT W
 WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/20/2023 11:56 Received: 10/20/2023 11:56

Test Name	Result	Flag	Ref-Ranges	Units	Site
-----------	--------	------	------------	-------	------

The detection of antibodies to *Borrelia burgdorferi* in cerebrospinal fluid may indicate central nervous system infection. However, consideration must be given to possible contamination by blood or transfer of serum antibodies across the blood-brain barrier.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Borrelia burgdorferi Ab, IgG, IB (CSF)	Positive	Reported Date: 2023.10.20 AB Negative	-:1	ARRL
--	----------	--	-----	------

INTERPRETIVE INFORMATION: *Borrelia burgdorferi* Ab, IgG, IB (CSF)

For this assay, a positive result is reported when any 5 or more of the following 10 bands are present: 18, 23, 28, 30, 39, 41, 45, 58, 66, or 93 kDa. All other banding patterns are reported as negative.

The detection of antibodies to *Borrelia burgdorferi* in cerebrospinal fluid may indicate central nervous system infection. However, consideration must be given to possible contamination by blood or transfer of serum antibodies across the blood-brain barrier.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Lyme Standard 2-Tier Testing, CSF Interp	Positive	Reported Date: 2023.10.20 AB Negative	-:1	ARRL
--	----------	--	-----	------

Both IgM and IgG-class antibodies to the *Borrelia* species causing Lyme disease were detected, suggesting recent or remote past infection.

If both first tier screen test and second tier tests are equivocal, consider repeat testing in 7-14 days if clinically warranted.

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000012
 WX0000003826
 Printed D&T: 10/20/23 11:58

Ordered By: KAJAL SITWALA, MD, PhD
 WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director
 Form: MM RL1
 PAGE 2 OF 3



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/20/2023 11:56 Received: 10/20/2023 11:56

Test Name	Result	Flag	Ref-Ranges	Units	Site
INTERPRETIVE INFORMATION: Lyme Standard 2-Tier, CSF, 2nd Tier					
IgG: For this assay, a positive result is reported when any five or more of the following 10 bands are present: 18, 23, 28, 30, 39, 41, 45, 58, 66, or 93 kDa. All other banding patterns are reported as negative.					
IgM: For this assay, a positive result is reported when any two or more of the following bands are present: 23, 39, or 41 kDa. All other banding patterns are reported as negative.					
The detection of antibodies to Borrelia burgdorferi in cerebrospinal fluid may indicate central nervous system infection. However, consideration must be given to possible contamination by blood or transfer of serum antibodies across the blood-brain barrier. Lyme disease diagnosis in serum is recommended prior to any CSF studies.					
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.					
Performed By: ARUP Laboratories 500 Chipeta Way Salt Lake City, UT 84108 Laboratory Director: Jonathan R. Genzen, MD, PhD CLIA Number: 46D0523979					

Reported Date: 2023.10.20 11:57 BBABC

Performing Site:

ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000012
WX0000003826

Printed D&T: 10/20/23 11:58

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 3 OF 3

Inactivate Test With Replacement			
Effective Date	11/28/2023		
Inactivated Test			
Name	SARS-COV-2 Qualitative		
Code	COVW		
Legacy Code ¹	COVW		
Interface Order Code	3000089		
Replacement Test			
Name	SAR-CoV-2 PCR		
Code	CVPCR		
CPT Code(s)	87635		
Specimen Requirements			
Specimen Required	<i>Collect:</i> Nasopharyngeal swab <i>Specimen Preparation:</i> One nasopharyngeal swab sent frozen in 3.0 mL viral transport media. <i>Minimum Volume:</i> 1.0 mL minimum <i>Transport Temperature:</i> Frozen		
Alternate Specimen	One oropharyngeal swab or NP/OP sent frozen in viral transport media. Nasal swab sent frozen in viral transport media. Our internal studies show that Phosphate Buffered Saline (PBS) and sterile saline do not interfere with the analytical performance of the COVID-19 assay. Liquid Amies buffer may decrease the analytical sensitivity of the assay and should be used only when other transport media are not available.		
Rejection Criteria	Calcium Alginate swabs, cotton swabs with wood shaft, received room temperature or >72 hours		
Stability	Room temperature: Not Recommended Refrigerated: 72 hours Frozen: 2 weeks		
Performing Information			
Methodology	Real-Time Polymerase Chain Reaction (PCR)		
Reference Range	Not detected		
Performed Days	Sunday - Saturday		
Turnaround Time	24 - 48 hours		
Performing Laboratory	Warde Medical Laboratory		
Interface Information			
Legacy Code ¹	CVPCR		
Interface Order Code	3000878		
Result Code	Name	LOINC Code	AOE/Prompt ²
3000879	Specimen Source		Yes
3000881	SAR-CoV-2		No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003826 F 12/05/1988 34 Y

Molecular

Collected: 10/20/2023 12:17 Received: 10/20/2023 12:17

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
SAR-CoV-2 PCR					
Specimen Source	Nasopharyngeal Swab				WMRL
SAR-CoV-2	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL

This test utilizes a real-time reverse-transcriptase polymerase chain reaction procedure to amplify and detect the 5'-nontranslated region of the rhinovirus genome. This procedure will detect all of the >200 rhinovirus types. This procedure cannot differentiate the individual rhinovirus types. The analytical sensitivity of this assay is 200 copies/mL. A "Not detected" result does not rule out infection.

This test uses commercial reagents that have not been approved or cleared by the FDA. The FDA has determined that such clearance or approval is not necessary. The performance characteristics of this procedure were determined by Warde Medical Laboratory.

This test is performed pursuant to a license agreement with Roche Molecular Systems, Inc.

Reported Date: 2023.10.20 12:17 CVPCR

Performing Site:

WMRL: WARDE MEDICAL LABORATORY 300 West Textile Road Ann Arbor MI 48108

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000021
WX0000003826
Printed D&T: 10/20/23 12:17

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 1

Inactivate Test With Replacement

Effective Date 11/28/2023

Inactivated Test

Name Comprehensive Virus Detection

Code CVD

Legacy Code¹ CVD

Interface Order Code 3099000

Replacement Test

Name Comprehensive Virus Panel

Code CVP

CPT Code(s) Varies: Adenovirus PCR 87798; CMV PCR 87496; Enterovirus PCR 87498; HSV1/2 PCR 87529 x 2; Norovirus 1/2 87798 x 2; Rhinovirus PCR 87798; VZV PCR 87798

Specimen Requirements

Specimen Required

Collect: Variable specimen types

Specimen Preparation: Swab specimens in viral transport medium.

CSF and body fluids undiluted in sterile, leak-proof container - 3.0 mL (1.5 mL minimum).

Body fluids undiluted in sterile, leak-proof container - 1.0 mL (1.0 mL minimum).

Biopsy/tissue specimens should be ordered for Tissue Comprehensive Virus Detection (TCVD).

Stool in IATA-approved screw-capped container - 2.0 mL (1.0 mL minimum) liquid stool or marble size solid stool.

Undiluted urine in an IATA-approved screw-capped container - 2.0 mL (1.0 mL minimum).

Blood in EDTA (lavender top) tube - 3.0 mL (2.0 mL minimum).

Bone Marrow in EDTA - 1.0 mL (0.5 mL minimum).

For respiratory specimens order RCVP Respiratory Comprehensive Virus Panel

Minimum Volume: Determined by specimen type

Transport Temperature: Varies by specimen type, see stability

Alternate Specimen

Stool in Cary Blair medium.

The Laboratory Director or Supervisor must approve testing of specimens other than those listed.

Rejection Criteria

Rectal swabs and stool preserved in formalin, SAF, or PVA.

Stool specimens received with diapers, tissue paper, tongue depressors, sticks, and other objects.

Serum will not be tested due to decreased virus concentrations.

Urine in Grey-Top (boric acid) urine vacutainers. Specimens in Amplicor, EIA, Gen-Probe, or ProbeTec transport media.

Specimens in bacterial transport media, Stewart medium (Cultuette) and specimens in bacteriological blood culture media.

Dry swabs, wooden swabs, calcium alginate swabs, and swabs in gel transports.

Specimens received in non-sterile or leaking containers will not be tested.

Respiratory specimens (Order RCVP)

Stability

Room temperature (18-25°C): 4 hours;

Refrigerated (2-8°C): 7 days;

Frozen (-20°C): 7 days

Frozen (-70°C): 3 months

Performing Information

Methodology	Source-driven panels. Polymerase Chain Reaction		
Reference Range	Negative		
Performed Days	Monday - Saturday		
Turnaround Time	2 days		
Performing Laboratory	Warde Medical Laboratory		
Interface Information			
Legacy Code ¹	CVP		
Interface Order Code	3000846		
Result Code	Name	LOINC Code	AOE/Prompt ²
3000847	Specimen Source	31208-2	Yes
3000848	Herpes simplex Type 1	16130-7	No
3000849	Herpes simplex Type 2	16131-5	No
3000851	Varicella Zoster Virus	11483-5	No
3000852	Cytomegalovirus	5000-5	No
3000853	Adenovirus	21055-9	No
3000854	Enterovirus	29591-5	No
3000856	Rhinovirus	40990-4	No
3000857	Norovirus Group 1	54905-5	No
3000858	Norovirus Group 2	54906-3	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Molecular

Collected: 10/20/2023 12:15 Received: 10/20/2023 12:15

Test Name	Result	Flag	Ref-Ranges	Units	Site
Comprehensive Virus Panel					
Specimen Source	CSF				WMRL
Herpes simplex Type 1	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Herpes simplex Type 2	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Varicella Zoster Virus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Cytomegalovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Adenovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Enterovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Rhinovirus	.TNP		Reported Date: 2023.10.20	-:1	WMRL
Norovirus Group 1	.TNP		Reported Date: 2023.10.20	-:1	WMRL
Norovirus Group 2	.TNP		Reported Date: 2023.10.20	-:1	WMRL

Reported Date: 2023.10.20 12:16 CVP

Performing Site:

WMRL: WARDE MEDICAL LABORATORY 300 West Textile Road Ann Arbor MI 48108

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000020
WX0000003827

Printed D&T: 10/20/23 12:16

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

Inactivate Test With Replacement

Effective Date 11/13/2023

Inactivated Test

Name	Dihydropyrimidine Dehydrogenase (DPYD), 3 Variants
Code	DPYD
Legacy Code¹	DPYD
Interface Order Code	3689500

Replacement Test

Name	Dihydropyrimidine Dehydrogenase (DPYD), 3 Variants
Code	DPYD3
CPT Code(s)	81232
Notes	New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	Collect: Lavender EDTA Specimen Preparation: Send 3.0 mL whole blood. Minimum Volume: 1.0 mL Transport Temperature: Refrigerated
Alternate Specimen	Whole blood: Yellow ACD A or B
Rejection Criteria	Plasma or serum, heparinized specimens. Frozen specimens in glass collection tubes.
Stability	Room temperature: 72 hours Refrigerated: 7 days Frozen: 30 days

Performing Information

Methodology	Polymerase Chain Reaction (PCR)/Fluorescence Monitoring
Reference Range	See report
Performed Days	Varies
Turnaround Time	7 - 12 days
Performing Laboratory	ARUP Reference Laboratory

Interface Information

Legacy Code¹	DPYD3
Interface Order Code	3600323

Result Code	Name	LOINC Code	AOE/Prompt ²
3600324	DPYD Specimen	31208-2	No
3600326	DPYD Genotype	45284-7	No
3600327	DPYD Phenotype	79719-1	No
3600328	EER Dihydropyrimidine Dehydrogenase	11526-1	No

Example Client, XYZ123
 1234 Warde Road
 Ann Arbor MI 48108

EXAMPLE, REPORT W
 WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 12:06 Received: 10/20/2023 12:06

Test Name	Result	Flag	Ref-Ranges	Units	Site
Dihydropyrimidine Dehydrogenase (DPYD), 3 Variants					
DPYD Specimen	Whole Blood				ARRL
DPYD Genotype	Cmpnd Hetero		Reported Date: 2023.10.20 AB	:-1	ARRL
DPYD Phenotype	Normal		Reported Date: 2023.10.20	:-1	ARRL

This result has been reviewed and approved by Yuan Ji, Ph.D.

BACKGROUND INFORMATION: Dihydropyrimidine Dehydrogenase (DPYD), 3 Variants

CHARACTERISTICS: 5-Fluorouracil (5-FU) is the most frequently used chemotherapeutic drug for the treatment of many types of cancer, particularly colorectal adenocarcinoma. Grade III-IV drug toxicity attributed to 5-FU occurs in approximately 16 percent of patients, and may include hematologic, gastrointestinal, and dermatologic complications. In some cases, this toxicity can cause death. When 5-FU is metabolized in the body, approximately 80 percent is catabolized by the dihydropyrimidine dehydrogenase (DPD) enzyme. Variants in the DPYD gene can lead to reduced 5-FU catabolism, resulting in the aforementioned toxicity complications.

INHERITANCE: Autosomal codominant.

CAUSE: DPYD gene mutations.

DPYD Variants Tested:

Non-functional alleles and toxicity risk:

*13 (rs55886062, c.1679T>G) - Increased risk

*2A (rs3918290, c.1905+1G>A) - Increased risk

Decreased function allele and toxicity risk:

c.2846A>T (rs67376798) - Increased risk

A result of *1 indicates no variants detected and is predictive of functional alleles and normal enzymatic activity.

CLINICAL SENSITIVITY: Estimated at 31 percent for the DPYD variants analyzed.

METHODOLOGY: Polymerase chain reaction (PCR) and fluorescence monitoring.

ANALYTICAL SENSITIVITY and SPECIFICITY: 99 percent.

LIMITATIONS: Only the targeted DPYD variants will be detected by this panel. Diagnostic errors can occur due to rare sequence variations. 5-FU drug metabolism, efficacy and risk for toxicity may be affected by genetic and non-genetic factors that are not evaluated by this test.

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

 F420000015
 WX0000003827

Printed D&T: 10/20/23 12:07

 Ordered By: KAJAL SITWALA, MD, PhD
 WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 2



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 12:06 Received: 10/20/2023 12:06

Test Name	Result	Flag	Ref-Ranges	Units	Site
-----------	--------	------	------------	-------	------

Genotyping does not replace the need for therapeutic drug monitoring or clinical observation.

Please note the information contained in this report does not contain medication recommendations, and should not be interpreted as recommending any specific medications. Any dosage adjustments or other changes to medications should be evaluated in consultation with a medical provider.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Counseling and informed consent are recommended for genetic testing. Consent forms are available online.

EER Dihydropyrimidine Dehydrogenase	EERUnavailable	Reported Date: 2023.10.20	-:1	ARRL
-------------------------------------	----------------	---------------------------	-----	------

Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Jonathan R. Genzen, MD, PhD
CLIA Number: 46D0523979

Reported Date: 2023.10.20 12:07 DPYD3

Performing Site:
ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000015
WX0000003827
Printed D&T: 10/20/23 12:07

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 2 OF 2

Inactivate Test With Replacement

Effective Date 11/13/2023

Inactivated Test

Name	Factor XIII, Qual w/1:1 Mix
Code	F13AR
Legacy Code¹	F13AR
Interface Order Code	3514900

Replacement Test

Name	Factor 13, Qual, Reflex to Factor 13 1:1 Mix
Code	F13RM
CPT Code(s)	85291; plus 85291 if 1:1 Mix performed at additional cost
Notes	New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	<i>Collect:</i> Light blue sodium citrate <i>Specimen Preparation:</i> Send 2.0 mL plasma in a screw capped plastic vial. CRITICAL FROZEN. <i>Minimum Volume:</i> 1.0 mL <i>Transport Temperature:</i> CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.
Rejection Criteria	Serum, EDTA plasma, clotted or hemolyzed specimens
Stability	Room temperature: 4 hours Refrigerated: Unacceptable Frozen: 14 days

Performing Information

Methodology	Qualitative Solubility Assay
Reference Range	See report
Performed Days	Sunday - Saturday
Turnaround Time	4 - 6 days
Performing Laboratory	ARUP Reference Laboratory

Interface Information

Legacy Code¹	F13RM
Interface Order Code	3600306

Result Code	Name	LOINC Code	AOE/Prompt ²
3600307	Factor XIII, Qualitative	3241-7	No
3600308	Factor XIII, 1:1 Mix	3241-7	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 12:02 Received: 10/20/2023 12:02

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Factor 13, Qual, Reflex to Factor 13 1:1 Mix					
Factor XIII, Qualitative	Lysis	AB	No Lysis		ARRL

Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Jonathan R. Genzen, MD, PhD
CLIA Number: 46D0523979

Factor XIII, 1:1 Mix	Lysis	Reported Date: 2023.10.20	-:1	
		AB		ARRL

Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Jonathan R. Genzen, MD, PhD
CLIA Number: 46D0523979

Reported Date: 2023.10.20 12:02 F13RM

Performing Site:

ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000013
WX0000003827
Printed D&T: 10/20/23 12:03

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 1

Inactivate Test With Replacement

Effective Date 11/28/2023

Inactivated Test

Name	Huntington Disease Mutation
Code	HDMUT
Legacy Code¹	HDMUT
Interface Order Code	3514250
Notes	Inactivating HDMUT and replacing with HDCAG

Replacement Test

Name	Huntington Disease (HD) CAG Repeat Expansion
Code	HDCAG
CPT Code(s)	81271
Notes	Inactivating HDMUT and replacing with HDCAG <i>New York DOH Approval Status: Yes</i>

Specimen Requirements

Specimen Required	<i>Collect:</i> Lavender EDTA <i>Specimen Preparation:</i> 2.0 mL whole blood collected in Lavender EDTA tube. <i>Minimum Volume:</i> 1.0 mL <i>Transport Temperature:</i> Refrigerated
Alternate Specimen	Whole blood: Yellow ACD A or B
Rejection Criteria	Plasma or serum, heparinized specimens. Frozen specimens in glass collection tubes
Stability	Room temperature: 7 days Refrigerated: 1 month Frozen: Unacceptable

Performing Information

Methodology	Polymerase Chain Reaction (PCR)/Fragment Analysis
Reference Range	See report
Performed Days	Varies
Turnaround Time	9 - 12 days
Performing Laboratory	ARUP Reference Laboratory

Interface Information

Legacy Code¹	HDCAG		
Interface Order Code	3600317		
Result Code	Name	LOINC Code	AOE/Prompt²
3600318	Huntington Disease Specimen	31208-2	No
3600319	Huntington Disease Allele 1	49637-2	No
3600321	Huntington Disease Allele 2	49638-0	No
3600322	Huntington Disease Interpretation	50621-2	No

Example Client, XYZ123
 1234 Warde Road
 Ann Arbor MI 48108

EXAMPLE, REPORT W
 WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:53 Received: 10/20/2023 11:53

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Huntington Disease (HD) CAG Repeat Expansion					
Huntington Disease Specimen	Whole Blood				ARRL
Huntington Disease Allele 1	15		Reported Date: 2023.10.20	-:1 CAG Repeats	ARRL
Huntington Disease Allele 2	16		Reported Date: 2023.10.20	-:1 CAG Repeats	ARRL
Huntington Disease Interpretation	See Note		Reported Date: 2023.10.20	-:1	ARRL

BACKGROUND INFORMATION: Huntington Disease (HD) CAG Repeat Expansion

CHARACTERISTICS: Neurodegenerative disorder causing progressive cognitive, motor, and psychiatric disturbances typically beginning at 35-44 years of age. An estimated 5 percent of individuals with HD are symptomatic as juveniles and 25 percent of individuals after age 50.

INCIDENCE: 1 in 15,000.

INHERITANCE: Autosomal dominant.

CAUSE: Expanded number of CAG repeats in the HTT gene. HD allele with reduced penetrance 36-39 CAG repeats; HD allele with full penetrance 40 or more CAG repeats.

CLINICAL SENSITIVITY AND SPECIFICITY: 99 percent.

METHODOLOGY: Triplet repeat-primed polymerase chain reaction (PCR) followed by size analysis using capillary electrophoresis. Repeat sizing precision is +/- 2 for alleles less than or equal to 50 repeats, +/- 3 for alleles with 51 to 75 repeats, and +/- 4 for alleles greater than 75 repeats.

ANALYTIC SENSITIVITY AND SPECIFICITY: 99 percent.

LIMITATIONS: Other neurodegenerative disorders will not be detected. Diagnostic errors can occur due to rare sequence variations. Interpretation of this test result may be impacted if this patient has had an allogeneic stem cell transplantation.

Phenotype	Number of CAG Repeats
-----	-----
Normal allele	less than or equal to 26
Mutable normal (intermediate) allele	27-35
HD allele with reduced penetrance	36-39

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

 F420000010 Ordered By: KAJAL SITWALA, MD, PhD
 WX0000003827 WX00000000002365
 Printed D&T: 10/20/23 11:54

 Kajal V. Sitwala, MD, PhD - Medical Director
 Form: MM RL1
 PAGE 1 OF 2



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 11:53 Received: 10/20/2023 11:53

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
HD allele with full penetrance	greater than or equal to 40				

COMPLIANCE STATEMENT: Laboratory Developed Test
(LDT)/Genetic
Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Jonathan R. Genzen, MD, PhD
CLIA Number: 46D0523979

Reported Date: 2023.10.20 11:53 HDCAG

Performing Site:

ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000010
WX0000003827
Printed D&T: 10/20/23 11:54

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 2 OF 2

Inactivate Test With Replacement

Effective Date 11/13/2023

Inactivated Test

Name	Zika Virus IgM Ab Capture (MAC), ELISA
Code	IKVIE
Legacy Code¹	IKVIE
Interface Order Code	3600580

Replacement Test

Name	Zika Virus IgM Ab Capture (MAC), ELISA
Code	ZVMAB
CPT Code(s)	86794
Notes	New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	<i>Collect:</i> Serum separator tube (SST) <i>Specimen Preparation:</i> Centrifuge, separate serum from cells within 2 hours of collection and send 2.0 mL serum in a screw capped plastic vial. Include patient history. <i>Minimum Volume:</i> 1.0 mL <i>Transport Temperature:</i> Refrigerated
Alternate Specimen	Serum: Red top
Rejection Criteria	Bacterially contaminated, Hemolysis, lipemic, heat-inactivated specimens, icteric, or turbid specimens
Stability	Room temperature: 48 hours Refrigerated: 14 days Frozen: 1 year

Performing Information

Methodology	Semi-quantitative Enzyme-Linked Immunosorbent Assay
Reference Range	Negative
Performed Days	Monday, Friday
Turnaround Time	3 - 9 days
Performing Laboratory	ARUP Reference Laboratory

Interface Information

Legacy Code¹	ZVMAB		
Interface Order Code	3600309		
Result Code	Name	LOINC Code	AOE/Prompt²
3600309	Zika Virus IgM Antibody Capture (MAC), by ELISA	80824-6	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/20/2023 12:08 Received: 10/20/2023 12:08

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Zika Virus IgM Antibody Capture (MAC), by ELISA	Negative		Negative		ARRL

INTERPRETIVE INFORMATION: Zika Virus IgM Ab Capture (MAC), ELISA

The possibility of false-positive or false-negative results must be considered. RT-PCR testing on both a serum and urine specimen is recommended by the Centers for Disease Control and Prevention (CDC) to rule out false-negative IgM results in patients experiencing symptoms for less than 2 weeks. Specimens collected for IgM testing greater than or equal to 2 weeks after symptom onset do not require any additional testing. For more information, please review the current clinical guidelines for Zika virus testing at:

www.cdc.gov/zika/

Performed By: ARUP Laboratories

500 Chipeta Way

Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

CLIA Number: 46D0523979

Reported Date: 2023.10.20 12:08

Performing Site:

ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000016
WX0000003826

Printed D&T: 10/20/23 12:09

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 1 OF 1

Inactivate Test With Replacement

Effective Date 11/13/2023

Inactivated Test

Name	JAK2 Exon 12 Mutation Analysis by PCR
Code	JK12P
Legacy Code¹	JK12P
Interface Order Code	3623000

Replacement Test

Name	JAK2 Exon 12 Mutation Analysis by PCR
Code	JAK2P
CPT Code(s)	81279
Notes	New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	Collect: Lavender EDTA Specimen Preparation: Send 5.0 mL whole blood. Minimum Volume: Whole blood: 1.0 mL; Bone marrow: 1.0 mL Transport Temperature: Refrigerated
Alternate Specimen	Bone marrow: Lavender EDTA - 3.0 mL
Rejection Criteria	Plasma, serum, FFPE tissue blocks/slides, frozen tissue, specimens collected in anticoagulants other than EDTA. Clotted or grossly hemolyzed specimens.
Stability	Whole blood, Bone marrow: Room temperature: 24 hours Refrigerated: 4 days Frozen: Unacceptable

Performing Information

Methodology	Polymerase Chain Reaction (PCR)
Reference Range	See report
Performed Days	Varies
Turnaround Time	5 - 11 days
Performing Laboratory	ARUP Reference Laboratory

Interface Information

Legacy Code¹	JAK2P		
Interface Order Code	3600302		
Result Code	Name	LOINC Code	AOE/Prompt²
3600303	JAK2 EX12, Source	31208-2	No
3600304	JAK2 Exon 12 Mutation Analysis by PCR	63421-2	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 12:05 Received: 10/20/2023 12:05

Test Name	Result	Flag	Ref-Ranges	Units	Site
JAK2 Exon 12 Mutation Analysis by PCR					
JAK2 EX12, Source	Whole Blood				ARRL
Reported Date: 2023.10.20 -1					
JAK2 Exon 12 Mutation Analysis by PCR	Positive				ARRL

There is evidence of a JAK2 mutation in Exon 12.

This result has been reviewed and approved by Jay Patel,
M.D.

INTERPRETIVE INFORMATION: JAK2 Exon 12 Mutation Analysis by
PCR

DNA from whole blood or bone marrow is isolated and subjected to PCR amplification in the presence of a short blocking oligonucleotide homologous to exon 12 (codons 537-544) of the wild-type JAK2 gene. The oligonucleotide is designed to specifically suppress PCR amplification of wild-type JAK2 exon 12 sequence. In contrast, JAK2 exon 12 mutations located between codons 537-544 disrupt proper binding of the blocking oligonucleotide during PCR amplification resulting in a product of approximately 225 base-pairs. Each assay includes control DNA from mutation positive and wild-type negative samples; all samples are tested in paired reactions with and without blocking oligonucleotide. A PCR product formed in the presence of blocking oligonucleotide indicates the presence of a mutation.

Results of this test must always be interpreted in the context of clinical and other relevant laboratory data such as erythropoietin level, exclusion of other causes of elevated hemoglobin, and should not be used alone for a diagnosis of polycythemia vera which is a form of malignancy, i.e., myeloproliferative disorder.

This test is expected to detect 1 out of 1000 normal cells harboring a JAK2 exon 12 mutation.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.
Performed By: ARUP Laboratories

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000014
WX0000003827
Printed D&T: 10/20/23 12:05

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 2



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 10/20/2023 12:05 Received: 10/20/2023 12:05

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
500 Chipeta Way Salt Lake City, UT 84108 Laboratory Director: Jonathan R. Genzen, MD, PhD CLIA Number: 46D0523979					

Reported Date: 2023.10.20 12:05 JAK2P

Performing Site:

ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000014
WX0000003827
Printed D&T: 10/20/23 12:05

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 2 OF 2

Inactivate Test With Replacement

Effective Date 11/13/2023

Inactivated Test

Name	Phosphatidylethanol (PEth), Whole Blood
Code	PETWB
Legacy Code¹	36002598
Interface Order Code	3600281

Replacement Test

Name	Phosphatidylethanol (PEth), WB, Quantitative
Code	PETHQ
CPT Code(s)	80321 (G0480)
Notes	New York DOH Approval Status: Yes

Specimen Requirements

Specimen Required	Collect: Lavender EDTA Specimen Preparation: Send 1.0 mL whole blood Minimum Volume: 0.5 mL Transport Temperature: Refrigerated
Alternate Specimen	Gray potassium oxalate, green lithium heparin
Rejection Criteria	Serum separator tube (SST), Red top, light blue sodium citrate, yellow ACD or SPS
Stability	Room temperature: 2 hours Refrigerated: 14 days Frozen: 30 days

Performing Information

Methodology	Quantitative Liquid Chromatography/Tandem Mass Spectrometry
Reference Range	See report
Performed Days	Sunday - Saturday
Turnaround Time	3 - 6 days
Performing Laboratory	ARUP Reference Laboratory

Interface Information

Legacy Code¹	PETHQ
Interface Order Code	3600311

Result Code	Name	LOINC Code	AOE/Prompt ²
3600312	PEth 16:0/18:1 (POPEth)	97607-6	No
3600313	PEth 16:0/18:2 (PLPEth)	97606-8	No
3600314	EER_Phosphatidylethanol	11502-2	No
3600316	PEth Interpretation		No

Example Client, XYZ123
 1234 Warde Road
 Ann Arbor MI 48108

EXAMPLE, REPORT W
 WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/20/2023 12:10 Received: 10/20/2023 12:10

Test Name	Result	Flag	Ref-Ranges	Units	Site
Phosphatidylethanol (PEth), WB, Quantitative					
PEth 16:0/18:1 (POPEth)	46			ng/mL	ARRL

PEth 16:0/18:1 (POPEth)
 Less than 10 ng/mL.....Not detected
 Less than 20 ng/mL.....Abstinence or light alcohol consumption
 20 - 200 ng/mL.....Moderate alcohol consumption
 Greater than 200 ng/mL.....Heavy alcohol consumption or chronic alcohol use

(Reference: W. Ulwelling and K Smith 2018 J. Forensic Sci)

PEth 16:0/18:2 (PLPEth)	48		Reported Date: 2023.10.20	:-1	ARRL
				ng/mL	

Reference ranges are not well established.

EER_Phosphatidylethanol	See Note		Reported Date: 2023.10.20	:-1	ARRL
-------------------------	----------	--	----------------------------------	-----	------

PEth Interpretation	See Note		Reported Date: 2023.10.20	:-1	ARRL
---------------------	----------	--	----------------------------------	-----	------

Phosphatidylethanol (PEth) is a group of phospholipids formed in the presence of ethanol, phospholipase D and phosphatidylcholine. PEth is known to be a direct alcohol biomarker. The predominant PEth homologues are PEth 16:0/18:1 (POPEth) and PEth 16:0/18:2 (PLPEth), which account for 37-46% and 26-28% of the total PEth homologues, respectively. PEth is incorporated into the phospholipid membrane of red blood cells and has a general half-life of 4-10 days and a window of detection of 2-4 weeks. However, the window of detection is longer in individuals who chronically or excessively consume alcohol. The limit of quantification is 10 ng/mL. Serial monitoring of PEth may be helpful in monitoring alcohol abstinence over time. PEth results should be interpreted in the context of the patient's clinical and behavioral history. Patients with advanced liver disease may have falsely elevated PEth concentrations (Nguyen VL et al 2018, Alcoholism Clinical & Experimental Research).

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003826 F 12/05/1988 34 Y

Referral Testing

Collected: 10/20/2023 12:10 Received: 10/20/2023 12:10

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
------------------	---------------	-------------	-------------------	--------------	-------------

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

Performed By: ARUP Laboratories

500 Chipeta Way

Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

CLIA Number: 46D0523979

Reported Date: 2023.10.20 12:11 PETHQ

Performing Site:

ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000017
WX0000003826

Printed D&T: 10/20/23 12:11

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 2 OF 2

Inactivate Test With Replacement			
Effective Date	11/28/2023		
Inactivated Test			
Name	Respiratory Comprehensive Virus Detection		
Code	RCVD		
Legacy Code ¹	RCVD		
Interface Order Code	3000386		
Replacement Test			
Name	Respiratory Comprehensive Virus Panel		
Code	RCVP		
CPT Code(s)	Adenovirus PCR 87798; CMV PCR 87496; Enterovirus PCR 87498; Influenza A/B 87502; HSV 1/2 87529 x 2; Parainfluenza 1/2/3 87631; Rhinovirus 87798; RSV PCR 87634		
Notes	Inactivating RCVD and replacing with RCVP New York DOH Approval Status: No		
Specimen Requirements			
Specimen Required	<i>Collect:</i> Variable Specimen types <i>Specimen Preparation:</i> Swab specimens in viral transport medium. Specimen source required. Send 3.0 mL Bronchoalveolar lavage/wash in sterile, leak-proof container. Send 3.0 mL Nasal washes in sterile, leak-proof container. Send 1.0 mL Nasal aspirates in vacuum trap. <i>Minimum Volume:</i> Bronchoalveolar lavage/wash: 1.5 mL Nasal washes: 1.5 mL Nasal aspirates: 0.5 mL <i>Transport Temperature:</i> Refrigerated		
Alternate Specimen	The Laboratory Director or Supervisor must approve testing of specimens other than those listed.		
Rejection Criteria	Specimens in Amplicor, EIA, Gen-Probe, or ProbeTec transport media. Specimens in bacterial transport media, Stewart medium (Cultures) and specimens in bacteriological blood culture media.		
Stability	Room temperature: 4 Hours Refrigerated (2-8°C): 7 Days Frozen (-70°C): 3 months		
Performing Information			
Methodology	Quantitative Polymerase Chain Reaction		
Reference Range	Negative		
Performed Days	Monday - Saturday		
Turnaround Time	2 Days		
Performing Laboratory	Warde Medical Laboratory		
Interface Information			
Legacy Code ¹	RCVP		
Interface Order Code	3000859		
Result Code	Name	LOINC Code	AOE/Prompt ²
3000861	Specimen Source	31208-2	Yes

3000862	Herpes simplex Type 1	16130-7	No
3000863	Herpes simplex Type 2	16131-5	No
3000864	Cytomegalovirus	5000-5	No
3000866	Adenovirus	21055-9	No
3000867	Enterovirus	29591-5	No
3000868	Influenza A	34487-9	No
3000869	Influenza B	40982-1	No
3000871	Respiratory Syncytial Virus	40988-8	No
3000872	Rhinovirus	40990-4	No
3000873	Parainfluenza 1	29908-1	No
3000874	Parainfluenza 2	29909-9	No
3000876	Parainfluenza 3	29910-7	No
3000877	SAR-CoV-2		No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Molecular

Collected: 10/20/2023 12:12 Received: 10/20/2023 12:12

Test Name	Result	Flag	Ref-Ranges	Units	Site
Respiratory Comprehensive Virus Panel					
Specimen Source	Respiratory - Lower				WMRL
Herpes simplex Type 1	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Herpes simplex Type 2	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Cytomegalovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Adenovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Enterovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Influenza A	DETECTED	AB	Reported Date: 2023.10.20 Not detected	-:1	WMRL
Influenza B	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Respiratory Syncytial Virus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Rhinovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Parainfluenza 1	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Parainfluenza 2	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Parainfluenza 3	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000018
WX0000003827
Printed D&T: 10/20/23 12:13

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 2



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Molecular

Collected: 10/20/2023 12:12 Received: 10/20/2023 12:12

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
SAR-CoV-2	Not detected		Not detected		WMRL

Reported Date: 2023.10.20 12:13 RCVP

Performing Site:

WMRL: WARDE MEDICAL LABORATORY 300 West Textile Road Ann Arbor MI 48108

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000018
WX0000003827
Printed D&T: 10/20/23 12:13

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 2 OF 2

Inactivate Test With Replacement			
Effective Date	11/28/2023		
Inactivated Test			
Name	Tissue Comprehensive Virus Detection		
Code	TCVD		
Legacy Code ¹	TCVD		
Interface Order Code	3099040		
Replacement Test			
Name	Tissue Comprehensive Virus Panel		
Code	TCVP		
CPT Code(s)	Varies: Adenovirus PCR 87798, CMV PCR 87496, Enterovirus PCR 87498, HSV1 and HSV2 PCR 87529 x 2, Influenza A & B PCR 87502, Parainfluenza 1,2,3 PCR 87631, Rhinovirus PCR 87798, RSV PCR 87634, VZV PCR 87798		
Notes	Inactivating TCVD and replacing with TCVP New York DOH Approval Status: No		
Specimen Requirements			
Specimen Required	Collect: Biopsy/tissue specimens Specimen Preparation: Biopsy/tissue specimens in saline or viral transport medium (SNAP frozen - 20°C). Transport Temperature: Frozen		
Alternate Specimen	The Laboratory Director or Supervisor must approve testing of specimens other than those listed.		
Rejection Criteria	Bone marrow (see Comprehensive Virus Detection) Non-tissue specimens Swab specimens Specimens in preservatives such as formalin or other tissue preservatives Specimens in bacterial transport or culture medium Specimens received in non-sterile or leaking containers		
Stability	Room temperature: 4 hours Refrigerated: 3 days Frozen: 30 days		
Performing Information			
Methodology	Source-driven panels. Polymerase Chain Reaction		
Reference Range	Not detected		
Performed Days	Monday - Saturday		
Turnaround Time	2 days		
Performing Laboratory	Warde Medical Laboratory		
Interface Information			
Legacy Code ¹	TCVP		
Interface Order Code	3000827		
Result Code	Name	LOINC Code	AOE/Prompt ²
3000828	Specimen Source	31208-2	Yes
3000829	Herpes simplex Type 1	16130-7	No

3000831	Herpes simplex Type 2	16131-5	No
3000832	Varicella Zoster Virus	11483-5	No
3000833	Cytomegalovirus	5000-5	No
3000834	Adenovirus	21055-9	No
3000836	Enterovirus	29591-5	No
3000837	Influenza A	34487-9	No
3000838	Influenza B	40982-1	No
3000839	Respiratory Syncytial Virus	40988-8	No
3000841	Rhinovirus	40990-4	No
3000842	Parainfluenza 1	29908-1	No
3000843	Parainfluenza 2	29909-9	No
3000844	Parainfluenza 3	29910-7	No



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W

WX0000003826 F 12/05/1988 34 Y

Molecular

Collected: 10/20/2023 12:13

Received: 10/20/2023 12:13

Test Name	Result	Flag	Ref-Ranges	Units	Site
Tissue Comprehensive Virus Panel					
Specimen Source	Lung Tissue				WMRL
Herpes simplex Type 1	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Herpes simplex Type 2	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Varicella Zoster Virus	NO BILL		Reported Date: 2023.10.20	-:1	WMRL
Cytomegalovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Adenovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Enterovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Influenza A	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Influenza B	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Respiratory Syncytial Virus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Rhinovirus	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Parainfluenza 1	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL
Parainfluenza 2	Not detected		Reported Date: 2023.10.20 Not detected	-:1	WMRL

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000019
WX0000003826
Printed D&T: 10/20/23 12:15

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director
Form: MM RL1
PAGE 1 OF 2



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003826 F 12/05/1988 34 Y

Molecular

Collected: 10/20/2023 12:13 Received: 10/20/2023 12:13

<u>Test Name</u>	<u>Result</u>	<u>Flag</u>	<u>Ref-Ranges</u>	<u>Units</u>	<u>Site</u>
Parainfluenza 3	Not detected		Not detected		WMRL

Reported Date: 2023.10.20 12:14 TCVP

Performing Site:

WMRL: WARDE MEDICAL LABORATORY 300 West Textile Road Ann Arbor MI 48108

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

F420000019
WX0000003826

Printed D&T: 10/20/23 12:15

Ordered By: KAJAL SITWALA, MD, PhD
WX00000000002353

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

PAGE 2 OF 2

Inactivate Test Without Replacement

Effective Date	11/28/2023
Name	Vitamin B12 Binding Capacity
Code	B12BC
Legacy Code	B12BCARP
Interface Code	3681540
Notes	Test discontinued.

Inactivate Test Without Replacement

Effective Date	11/13/2023
Name	Influenza A Virus Ab, IgG
Code	INFAG
Legacy Code	INFLAABGAR
Interface Code	3684030
Notes	Test discontinued. Suggest Warde test FLPCR as replacement

Inactivate Test Without Replacement

Effective Date	11/13/2023
Name	Influenza B Virus Ab, IgG
Code	INFBG
Legacy Code	INFLBABGAR
Interface Code	3684050
Notes	Test discontinued. Suggest Warde test FLPCR as replacement

Inactivate Test Without Replacement

Effective Date	11/7/2023
Name	Mayfly (Ephemeorptera) IgE
Code	MAYFL
Legacy Code	MAYFL
Interface Code	3300047
Notes	Test discontinued.