

LABORATORY REPORT

QC ACCOUNT (WARDE) 300 W. TEXTILE ANN ARBOR MI 48108

EXAMPLE, REPORT W

WX0000003827 M 07/08/1978 46 Y

Referral Testing

Collected: 08/13/2024 15:12 Received: 08/13/2024 15:12

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

Huntington Disease (HD) CAG Repeat Expansion

Huntington Disease SpecimenWhole BloodARRLHuntington Disease Allele 115CAG RepeatsARRLHuntington Disease Allele 216CAG RepeatsARRLHuntington Disease InterpretationSee NoteARRL

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 SENSITIVITYE AND SPECIFICITY: 99 percent.

METHODOLOGY: Triplet repeat-primed polymerase chain reaction (PCR) followed by size analysis using capillary

electrophoresis. Repeat sizing precision is \pm 4 for alleles less than or equal to 50 repeats, \pm 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

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

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

G413000043 WX0000003827 Printed D&T: 08/13/24 15:13 Ordered By: KAJAL SITWALA, MD, PHD WX00000000002516



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CLIA Number: 46D0523979

Reported Date: 08/13/2024 15:12 HDCAG

Performing Site:

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

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