

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

EXAMPLE, REPORT

WX0000000237 F 12/05/1988 37 Y

Referral Testing

Collected: 03/18/2026 08:26

Received: 03/18/2026 08:26

Test Name	Result	Flag	Ref-Ranges	Units	Site
Dihydropyrimidine Dehydrogenase (DPYD)					
DPYD Specimen	Whole Blood				ARRL
DPYD Allele 1	*1				ARRL
DPYD Allele 2	*13	AB			ARRL
DPYD Activity Score	1	AB			ARRL
DPYD Phenotype	Intermediate	AB			ARRL
DPYD Interpretation	See Note				ARRL

This result has been reviewed and approved by Pinar Bayrak-Toydemir, M.D., Ph.D.

BACKGROUND INFORMATION: Dihydropyrimidine Dehydrogenase (DPYD)

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:

(Variants are numbered according to NM_000110 transcript)

Nonfunctional alleles and increased toxicity risk:

c.1024G>A (rs183385770)

c.1774C>T (rs59086055)

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

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

Decreased function alleles and increased toxicity risk:

c.557A>G (rs115232898)

c.868A>G (rs146356975)

c.2279C>T (rs112766203)

c.2846A>T (rs67376798)

c.1129-5923C>G (rs75017182)

Functional alleles and normal enzymatic activity:

*1 indicates no variants detected.

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

E718000000
 WX0000000237

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Ordered By: CLIENT CLIENT
 WX00000000000511

Kajal V. Sitwala, MD, PhD - Medical Director

Form: MM RL1

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LABORATORY REPORT

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METHODOLOGY: Polymerase chain reaction (PCR) and fluorescence monitoring.
ANALYTICAL SENSITIVITY and SPECIFICITY: Greater than 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 nongenetic factors that are not evaluated by this test. 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 U.S. 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

See Note

ARRL

Authorized individuals can access the ARUP Enhanced Report with an ARUP Connect account using the following link.
Your local lab can assist you in obtaining the patient report if you don't have a Connect account.
<https://c11-erpt.aruplab.com/?t=0684299z3YF6w26aC1552>
Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Jonathan R. Genzen, MD, PhD
CLIA Number: 46D0523979

Reported Date: 03/18/2026 08:26 DPYDE

Performing Site:

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

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