ARUP LABORATORIES | aruplab.com
500 Chipeta Way, Salt Lake City, Utah 84108-1221
phone: 801-583-2787, toll free: 800-522-2787
Jonathan R. Genzen, MD, PhD, Chief Medical Officer

PATIENT REPORT

Patient Age/Sex: Female

Specimen Collected: 5/9/2025 08:43 MDT

CYP3A4 and CYP3A5 **|Received: 5/9/2025 08:46 MDT** **Report/Verified: 5/9/2025 09:08 MDT**

Procedure	Result	Units	Reference Interval
3A4/3A5 Specimen	Whole Blood		
CYP3A4 Genotype	*1/*22		
CYP3A5 Genotype	*3/*3		
CYP3A5 Phenotype	**Poor** *		
3A4/3A5 Interpretation	See Note f1 i1		
EER CYP3A4 CYP3A5	See Note f2		

Result Footnote

f1: 3A4/3A5 Interpretation

The following CYP3A4 allele(s) were detected: *1/*22

The following CYP3A5 allele(s) were detected: *3/*3. This result predicts the poor metabolizer phenotype.

Recommendation: Guidelines for genotype-based dosing are published by the Clinical Pharmacogenetics Implementation Consortium (CPIC) and can be found at: https://cpicpgx.org/ and https://www.pharmgkb.org/.

This result has been reviewed and approved by [redacted]

f2: EER CYP3A4 CYP3A5
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.

[redacted]

Test Information

i1: 3A4/3A5 Interpretation

BACKGROUND INFORMATION: CYP3A4 and CYP3A5

CHARACTERISTICS: The cytochrome P450 (CYP) 3A subfamily of enzymes is involved in metabolism of many drugs. Variants in the genes that code for CYP3A4 and CYP3A5 may influence pharmacokinetics of CYP3A substrates, and may predict or explain nonstandard dose requirements, therapeutic failure, or adverse reactions.

INHERITANCE: Autosomal codominant.

CAUSE: CYP3A4 or CYP3A5 gene variants affect enzyme function.

VARIANTS TESTED:
(Variants are numbered according to NM_017460 transcript for CYP3A4 and NM_000777 transcript for CYP3A5)

*1: Indicative of no detected targeted variants and an assumption of functional allele.

Test Information

i1: 3A4/3A5 Interpretation

CYP3A4*22: rs35599367, c.522-191C>T

CYP3A5*3: rs776746, c.219-237A>G
CYP3A5*6: rs10264272, c.624G>A
CYP3A5*7: rs41303343, c.1035dupT

METHODOLOGY: Polymerase chain reaction (PCR) and fluorescence monitoring.
ANALYTICAL SENSITIVITY AND SPECIFICITY: Greater than 99 percent.
LIMITATIONS: Only the targeted CYP3A4 and CYP3A5 variants will be detected by this panel, and assumptions about phase and content are made to assign alleles. Publicly available sources such as the www.pharmvar.org or www.pharmgkb.org provide guidance on phenotype predictions and allele frequencies. Diagnostic errors can occur due to rare sequence variations. Risk of therapeutic failure or adverse reactions with CYP3A substrates may be affected by genetic and nongenetic factors that are not detected by this test. This result does not replace the need for therapeutic drug or clinical monitoring.

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.