

Client: Example Client ABC123 123 Test Drive Salt Lake City, UT 84108 UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB /1992

Gender: Female

Patient Identifiers: 01234567890ABCD, 012345

Visit Number (FIN): 01234567890ABCD **Collection Date:** 00/00/0000 00:00

Hemochromatosis (HFE) 3 Variants

ARUP test code 3019007

Whole Blood **HFEPCR Specimen**

C282Y Hemochromatosis Variant Negative

H63D Hemochromatosis Variant Heterozygous

S65C Hemochromatosis Variant Heterozygous

Hemochromatosis Interpretation See Note

Indication for testing: Carrier screening or diagnostic testing for hereditary hemochromatosis.

Hemochromatosis Interpretive Results:

Compound Heterozygous H63D/ S65C: C282Y: Negative The patient is negative for the HFE C282Y mutation.

H63D: Heterozygous The patient is heterozygous for the HFE H63D

mutation.

S65C: Heterozygous The patient is heterozygous for the HFE S65C

mutation.

This genotype has not been significantly correlated with hereditary hemochromatosis.

This result has been reviewed and approved by

H=High, L=Low, *=Abnormal, C=Critical

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BACKGROUND INFORMATION: Hemochromatosis (HFE) 3 Variants

CHARACTERISTICS: Disorder of iron metabolism resulting in excessive iron storage leading to increased skin pigmentation, arthritis, hypogonadism, diabetes mellitus, heart arrhythmias/failure, cirrhosis and liver carcinoma. INCIDENCE: One in 300 individuals of Northern European descent; unknown in other ethnicities.
INHERITANCE: Autosomal recessive.
PENETRANCE: 5 percent of C282Y homozygotes, 1 percent of C282Y/H63D compound heterozygotes and rare H63D homozygotes develop clinical symptoms.
CAUSE: Two pathogenic HFE gene mutations on opposite chromosomes. MUTATIONS TESTED: p.C282Y (c.845G>A), p.H63D (c.187C>G), and p.S65C (c.193A>T).
CLINICAL SENSITIVITY: 85 percent of hereditary hemochromatosis in Northern Europeans is caused by C282Y homozygosity and 5 percent by C282Y/H63D compound heterozygosity.
METHODOLOGY: PCR and fluorescence monitoring.
ANALYTICAL SENSITIVTY AND SPECIFICITY: 99 percent.
LIMITATIONS: HFE mutations, other than those targeted, will not be detected. Diagnostic errors can occur due to rare sequence variations.

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.

VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
HFEPCR Specimen	25-204-102427	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
C282Y Hemochromatosis Variant	25-204-102427	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
H63D Hemochromatosis Variant	25-204-102427	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
S65C Hemochromatosis Variant	25-204-102427	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hemochromatosis Interpretation	25-204-102427	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical

Patient: Patient, Example
ARUP Accession: 25-204-102427
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
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