

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

Physician: Doctor, Example

Patient: Patient, Example

DOB: [REDACTED]/1959
Gender: Male
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
Collection Date: 00/00/0000 00:00

JAK2 Exon 12-Mutation Analysis by PCR
ARUP test code 3020079

JAK2EX12, Source	whole blood
JAK2EX12, Interpretation	Not Detected There is no evidence of a JAK2 Exon 12 mutation. This result does not exclude the possibility of a JAK2 Exon 12 mutation below the test limit of detection or one which is not detectable by the assay specific design. This result has been reviewed and approved by [REDACTED]

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

Unless otherwise indicated, testing performed at:

ARUP LABORATORIES | 800-522-2787 | aruplab.com
500 Chipeta Way, Salt Lake City, UT 84108-1221
Jonathan R. Genzen, MD, PhD, Laboratory Director



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 codons 537-544 of exon 12 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 does not identify JAK2 mutation outside of codons 537-544, and duplications or missense variants that compromise oligonucleotide binding may not be detected.

Limit of Detection: 5 percent mutant alleles for length-altering mutations.

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.

VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
JAK2EX12, Source	25-295-101121	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
JAK2EX12, Interpretation	25-295-101121	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