

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

Physician: Doctor, Example

**Patient: Patient, Example**

**DOB:** ██████████  
**Gender:** Female  
**Patient Identifiers:** 01234567890ABCD, 012345  
**Visit Number (FIN):** 01234567890ABCD  
**Collection Date:** 00/00/0000 00:00

**BRAF V600E Mutation Detection in Circulating Cell-Free DNA by Digital Droplet PCR**

ARUP test code 2013921

**BRAF V600E cfDNA Result**

Not Detected

No BRAF V600E mutation was detected. This result does not rule out the possibility of a mutation below the detectable limit of the assay.

This result has been reviewed and approved by Anna Matynia, M.D.

**BACKGROUND INFORMATION:** BRAF V600E Mutation Detection in circulating Cell-Free DNA by Digital Droplet PCR

Determining BRAF mutation status is useful in identifying patient eligibility for therapy with kinase inhibitors. The oncogenic BRAF c.1799T>A, p.Val600Glu (V600E) mutation is associated with clinical response to the BRAF inhibitors dabrafenib (Tafinlar) and vemurafenib (Zelboraf) and the MEK inhibitors trametinib (Mekinist) and cobimetinib (Cotellic) in some tumor types.

**METHODOLOGY:** Circulating cfDNA is extracted from plasma. Mutation status and quantitation for BRAF V600E is determined by digital droplet PCR. The BRAF V600E mutant allele frequency (mutant alleles/(mutant + wild type alleles)\*100 percent) and BRAF V600E mutant copies per mL plasma are calculated.

**LIMITATIONS:** Other variants at the BRAF V600 codon (V600K, V600R) will not be detected. Mutations in other locations within the BRAF gene or in other genes will not be detected.

**LIMIT OF DETECTION:** Limit of detection is dependent on amplifiable cell-free DNA extracted from plasma. Limit of detection ranges from 0.5 percent to below 0.01 percent mutant allele frequency.

**CLINICAL DISCLAIMER:** Results of this test must always be interpreted within the clinical context and other relevant data and should not be used alone for the diagnosis of malignancy.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS

BRAF V600E cfDNA Mutant Allele Frequency 0.00

BRAF V600E cfDNA Mutant copies/mL 0.00

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

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
BRAF V600E cfDNA Result	20-142-402438	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
BRAF V600E cfDNA Mutant Allele Frequency	20-142-402438	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
BRAF V600E cfDNA Mutant copies/mL	20-142-402438	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