

## BRAF Mutation Analysis (V600E)

Order Name: **BRF MUTAT**  
Test Number: 9100927  
Revision Date: 09/01/2023

TEST NAME	METHODOLOGY	LOINC CODE
BRAF Mutation Analysis (V600E)	Polymerase Chain Reaction	

### SPECIMEN REQUIREMENTS

Specimen	Specimen Volume (min)	Specimen Type	Specimen Container	Transport Environment
Preferred	See Instructions	Tissue	Paraffin Block	Room Temperature
Alternate 1	3 mL (1 mL)	Whole Blood	EDTA (Lavender Top)	Room Temperature
Alternate 2	3 mL (1 mL)	Bone Marrow	EDTA (Lavender Top)	Room Temperature

**Instructions**

Collection Instructions: Specimens must be received by noon on Friday to receive results by Friday.

**Primary:**Tissue (formalin-fixed, paraffin-embedded block., Tissue (paraffin-embedded section).

**Alternate::** 3mL (1mL) Bone marrow or Whole Blood; Unstained 5 um slides (preferably 5 slides) Lavender top tube (EDTA) Pink top tube (EDTA) Yellow top tube (ACD - A)

**Rejection Criteria:** Tissue specimens with no tumor, frozen specimens and specimens fixed/processed in alternative fixatives (alcohol Prefer®) or fixatives containing heavy metals are unacceptable.

**Specimen Processing Instructions:** Paraffin-embedded, formalin-fixed tissue block or unstained 5um slides, preferably 5 slides. If the specimen to be tested is a needle biopsy or contains less than 50% tumor, send 10 unstained 5um slides.

**Stabilities/Storage** (Collection to initiation of testing): Ambient= Indefinite, Refrigerated= Indefinite, Frozen= Unacceptable.

**Shipping Instructions:** Ship ambient. Protect Paraffin block from excessive heat by shipping in a cooled container during warm weather.

### GENERAL INFORMATION

Testing Schedule	Testing Initiated on Monday
Expected TAT	Within 7-14 Days
Clinical Use	The BRAF V600E mutation has been identified in 40% to 60% of malignant melanomas. The majority of BRAF mutations seen in melanoma occur in codon 600; the predominant mutation in this codon is V600E (GTG to GAG). Recent clinical trial data show promising results following treatment of melanoma with the BRAF V600E inhibitor, PLX4032 (RG7204, vemurafenib [ZELBORAF(R)]; Plexikon/Roche Pharmaceuticals). Eighty-one percent of patients harboring the V600E BRAF mutation had complete or partial tumor regression. This BRAF V600E mutation test can be used to help select melanoma patients who are more likely to respond to treatment with vemurafenib. Vemurafenib is not recommended for use in patients with wild type BRAF.
Notes	This test goes to Tricore TC: MDBRAF
CPT Code(s)	<b>(Pre-Authorization Required)</b> 81210  Please submit Pre-Authorization form when the patient has United Healthcare insurance.
Lab Section	Reference Lab