

# Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.





# **BRAF Mutation Analysis by PCR**

#### **Alternative Name**

**BRAF V600** 

# Methodology

Molecular

## **Test Description**

BRAF Mutation Analysis Assay is based on PCR amplification and detection of target DNA using complementary primer pairs and oligonucleotide probes labeled with fluorsescent dyes. This assay is designed to detect V600 mutations E, K, D, R, and G. For solid tumors, tumor enrichment is performed before extraction. Expanded coverage for BRAF exons 11 & 15 is available in the RAS/RAF Panel. Testing is available separately or in combination with HRAS, KRAS, and NRAS in the RAS/RAF Panel.

# **Clinical Significance**

BRAF mutations are frequently found in human cancers. They are found most frequently in melanoma (50-70%), papillary thyroid cancer (36-40%) and almost all hairy cell leukemia. BRAF mutations are also found with low frequency in colorectal cancer (5-12%), non-small cell lung cancer (NSCLC), acute myeloid leukemia (AML), glioma, sarcoma, breast cancer, hepatoma, and ovarian cancer. The presence of BRAF V600E mutation in colon cancer with microsatellite instability (MSI) provides strong support for sporadic (non-Lynch) colon cancer.

#### **Specimen Requirements**

- **FFPE solid tumor tissue:** Paraffin block is preferred. Alternatively, send 1 H&E slide plus 5-10 unstained slides cut at 5 or more microns. Please use positively-charged slides and 10% NBF fixative. Do not use zinc fixatives.
- Peripheral blood: 5 mL in EDTA tube.
- Bone marrow: 2 mL in EDTA tube.

# **Storage & Transportation**

Use cold pack for transport, making sure cold pack is not in direct contact with specimen. All slides can be packed at room temperature.

### CPT Code(s)\*

81210

#### **New York Approved**

Yes

#### **Level of Service**

Global

#### **Turnaround Time**



\*The CPT codes provided with our test descriptions are based on AMA guidelines and are for informational purposes only. Correct CPT coding is the sole responsibility of the billing party.

Please direct any questions regarding coding to the payor being billed.

NeoGenomics Laboratories is a specialized oncology reference laboratory providing the latest technologies, testing partnership opportunities, and interactive education to the oncology and pathology communities. We offer the complete spectrum of diagnostic services in molecular testing, FISH, cytogenetics, flow cytometry, and immunohistochemistry through our nation-wide network of CAP-accredited, CLIA-certified laboratories.

Committed to research as the means to improve patient care, we provide Pharma Services for pharmaceutical companies, in vitro diagnostic manufacturers, and academic scientist-clinicians. We promote joint publications with our client physicians. NeoGenomics welcomes your inquiries for collaborations. Please contact us for more information.

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