



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.





BRAF Rearrangement

Alternative Name

BRAF translocation

Methodology

FISH

Test Description

Probes: BRAF (7q34)

Disease(s): Brain cancer, thyroid cancer, melanoma

Clinical Significance

This test uses a break-apart BRAF probe to detect the BRAF-KIAA1549 fusion common in low-grade astrocytomas and to detect any other known and potential BRAF rearrangement partners. The BRAF-KIAA1549 fusion causes constitutive BRAF kinase activation and is found in about 70% of pilocytic astrocytomas and 15% of other low-grade gliomas. Frequency diminishes with patient age, from 80% in the first decade to <10% in pilocytic astrocytomas in patients over 40. The detection of a BRAF fusion is most suggestive of a low-grade glioma. Prognosis associated with BRAF fusions shows a positive trend. BRAF translocations have been reported in thyroid cancer and melanoma but are infrequent. MEK inhibitors, alone and in combination with BRAF inhibitors, are being investigated. BRAF inhibition alone may lead to activation of a feed-back loop with up-regulation and potential for further tumor growth. [BRAF Mutation Analysis](#) is also available for detection of the V600E mutation (and others) found in non-pilocytic gliomas, thyroid cancer, and melanoma.

Specimen Requirements

- **Bone marrow aspirate:** N/A
- **Peripheral blood:** N/A
- **Fresh, unfixed tissue:** N/A
- **Fluids:** N/A
- **Paraffin block:** Send paraffin block. Also send circled H&E slide for tech-only (required).
- **Cut slides:** H&E slide (required) plus 4 unstained slides cut at 4-5 microns. Circle H&E slide for tech-only.

Storage & Transportation

Use cold pack for transport. Make sure cold pack is not in direct contact with specimen.

CPT Code(s)*

88377x1 manual or 88374x1 automated.

New York Approved

Yes

Level of Service

Global, Technical

Turnaround Time

3-5 days

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.

*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.



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