



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



Brain NGS Fusion Panel

Alternative Name

Brain Tumor Fusion Panel

Methodology

Molecular

Test Description

The Brain Tumor NGS Fusion Panel is an RNA-based next-generation sequencing panel that detects gene rearrangements (fusions) with known and novel fusion partners of these 28 genes: ALK, BRAF, CIC, EGFR including EGFRvIII, EML4, ETV6, EWSR1, FGFR1, FGFR2, FGFR3, FUS, KIAA1549, MAML2, MET, MN1, MYB, MYBL1, NTRK1, NTRK2, NTRK3, PRKCA, RAF1, ROS1, STAT6, TACC3, TFG, YAP1, and ZFTA (C11orf95).

Clinical Significance

The Brain Tumor NGS Fusion Panel is intended to detect gene fusions associated with brain tumors to aid in the diagnosis, disease classification, and therapy determination as outlined in the 2021 WHO Classification of Tumors of the CNS, 5th edition. Gliomas are the most common primary brain tumors with high recurrence and mortality rates. Gene fusions are identified in 30-50% of glioblastomas (GBMs). Potentially druggable gene fusions in all GBMs include FGFR (1.2%-8.3%), EGFR (2.2%-4%), and NTRK (1.2%-1.7%).

Specimen Requirements

- **FFPE 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.

Storage & Transportation

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

CPT Code(s)*

81449

Medicare MoIDX CPT Code(s)*

81449

New York Approved

Yes

Level of Service

Global

Turnaround Time

21 Days

References

1. Louis DN et al. The 2021 WHO Classification of Tumors of the Central Nervous System: a summary. *Neuro-Oncology*. 2021;23(8):1231-1251. <https://doi.org/10.1093/neuonc/noab106>

*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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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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9490 NeoGenomics Way
Fort Myers, FL 33912
Phone: 239.768.0600/ Fax: 239.690.4237
neogenomics.com

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Rev. 052024