MYCN (n-MYC) Amplification

**Alternative Name**

n-MYC

**Methodology**

FISH

**Test Description**

**Probes:** MYCN (2p24.3) | Centromere 2

**Disease(s):** Brain cancer, neuroblastoma, alveolar rhabdomyosarcoma, small-cell lung cancer, prostate cancer.

**Clinical Significance**

The MYCN gene, which encodes the n-myc protein, is a proto-oncogene with highest expression in the developing brain and insignificant expression in normal adult tissues. Gene amplification is detected in approximately 20% of neuroblastoma and a variety of other solid tumors including 5% medulloblastoma, glioblastoma multiforme, 25% alveolar rhabdomyosarcoma, 15-20% small-cell lung cancer, 40% neuroendocrine prostate cancer, and 5% prostate adenocarcinoma. MYCN amplifications are associated with aggressive disease and/or poor outcome. Detection can be useful to stratify patients for aggressive treatment. Numerous therapies are in development.

**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

*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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