

LABORATORY SERVICES

Important Test Updates – 03/10/2022

Next Generation Sequencing (NGS) Neuroblastoma Panel

On March, 14, 2022, the Institute for Genomic Medicine (IGM) Clinical Laboratory will be offering a new test called **Next Generation Sequencing (NGS) Neuroblastoma Panel**.

This test is a targeted NGS based assay performed on Neuroblastoma tumor specimens to detect sequence alterations in the following genes: *ALK, ATRX, BRAF, HRAS, KRAS, NRAS, PTPN11, TP53*. Results of this test can aid in prognosis and treatment.

Please note, this test will be replacing the **ALK Targeted Sequencing Assay** (test code ALK).

Ordering information:

Next Generation Sequencing (NGS) Neuroblastoma Panel	
Test Code (SQ Code)	NGSNBL
Specimen Types & Volume:	Test is only for neuroblastoma; no other cancer type accepted. Sample must contain 20% or greater tumor content. Pre-treatment sample is strongly preferred. Below sample types accepted: <ul style="list-style-type: none">• Snap-frozen tumor tissue• Fresh tumor tissue• FFPE tumor tissue• OCT-embedded tumor tissue• Bone marrow
Specimen Transport / Stability	<ul style="list-style-type: none">• Frozen tumor tissue – transport frozen (buried in dry ice) via overnight courier (24 hour stability)• Fresh tumor tissue – transport in transport media via overnight courier (24 hour stability)• FFPE tumor tissue block or scrolls – transport at ambient temperature and avoid heat (6 month stability)• OCT-embedded tumor tissue – transport frozen (buried in dry ice) via overnight courier (24 hour stability)• Bone marrow and whole blood – transport room temperature via overnight courier (24 hour stability)
Typical TAT:	14 Days
Comments:	<p>The NGS neuroblastoma panel is performed using an anchored multiplex PCR assay (ArcherDx, Inc.; Boulder, CO) and next generation sequencing.</p> <p>PLEASE NOTE:</p> <ol style="list-style-type: none">1) A minimum of 20% tumor cellularity must be present in the submitted sample (based on internal pathology review) for accurate reporting of somatic mutations. Testing will not be carried out on samples with <20% tumor cellularity.2) An FFPE tissue block is preferred over FFPE tissue scrolls. If submitting FFPE tissue scrolls, an H&E slide from a consecutive cut is also required. Please contact the laboratory at 614-722-2866 to request the scroll calculator application to be emailed to you to determine the number of scrolls required. Tissue blocks will be returned to the treating institution upon request.3) Samples submitted under a Children's Oncology Group (COG) study protocol can also be used in most cases (some cases may require approval from the COG study chair); please call the laboratory to confirm COG biobank sample availability.

If you have questions about the Next Generation Sequencing (NGS) Neuroblastoma Panel, please contact Laboratory Services at (800) 934-6575 and ask to speak with a laboratory genetic counselor.

