

Solid Tumor Mutation Panel by Next Generation Sequencing

Effective Date: January 3, 2016

The Advanced Diagnostic Laboratory in Beaumont Royal Oak's Department of Pathology and Laboratory Medicine will offer a next generation sequencing assay for the detection of clinically actionable mutations in solid tumors. The panel is primarily designed for patients with adenocarcinomas of lung and colorectal origin, malignant melanoma, and gastrointestinal stromal tumors.

Synonyms	Solid tumor panel; Trusight Tumor 15; next generation sequencing; colon adenocarcinoma mutation; lung adenocarcinoma mutation; melanoma mutation; gastrointestinal stromal tumor mutation; gene panel
Instructions	Submit formalin fixed, paraffin embedded tumor tissue block with corresponding H&E stained slide (blank slides and paraffin shavings not accepted).
Specimen Collection Criteria	Maintain paraffin-embedded tissue at room temperature (20-25°C or 68-77°F). DO NOT REFRIGERATE OR FREEZE TISSUE BLOCKS
Specimen Preparation for Courier Transport	Transport tissue blocks at room temperature (20-25°C or 68-77°F).
Rejection Criteria	Specimens that are treated with decalcifying agents or fixatives other than 10% neutral-buffered formalin, or that have been improperly labeled will not be tested.
Performed	Once per week, usually Monday. Results available in 10 business days
Reference Range	No variants detected or only likely benign variants detected.
Test Methodology	Tumor samples are prepared for sequencing with the Illumina TruSight Tumor 15 library preparation kit and sequenced on the Illumina MiSeq instrument with the Illumina TruSight Tumor 15 sequencing kit. Analysis is performed with MiSeq Reporter and Cartagenia BenchLab.
Interpretation	This test is designed to detect clinically relevant mutations in the AKT1, BRAF, EGFR, ERBB2, FOXL2, GNA11, GNAQ, KIT, KRAS, MET, NRAS, PDGFRA, PIK3CA, RET, and TP53 genes. The sequenced regions in each gene include content cited as relevant by the National Comprehensive Cancer Network (NCCN) and the European Society for Medical Oncology (ESMO). Customized interpretations are provided for each relevant variant detected.
Test Code	TST15
CPT Code	81445

If you have questions, please contact Client Services (1-800-551-0488, option 5).

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http://employee.beaumont.edu/portal/pls/portal/ip30dev.page_pkg.page?xid=lab_bulletins

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Beaumont Laboratory

Customer Service

1-800-551-0488