



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



Universal Solid Tumor NGS Fusion Panel

Alternative Name

Universal Solid Tumor Fusion Panel

Methodology

Molecular

Test Description

The Universal Solid Tumor NGS Fusion Panel is an RNA-based next-generation sequencing panel that detects translocations and fusions with known and novel fusion partners of these genes: ABL1, ACSL3, ACTB, ACTL6A, AFDN, AFF1, AFF3, AFF4, AHRR, AKAP9, AKT3, ALK, AR, ARID1A, ASPSCR1, ATF1, ATIC, AXL, BCOR, BCR, BRAF, BRCA1, BRCA2, BRD4, C11orf95, CAMTA1, CANT1, CAPZA2, CARS1, CBFA2T3, CCDC170, CCDC6, CCNB3, CCND1, CCND2, CCND3, CD274, CD74, CDH11, CDK4, CDK6, CDKN2D, CHCHD7, CIC, CIITA, CLTC, CNBP, COA5, COL1A1, COL1A2, CREB1, CREB3L1, CREB3L2, CREBBP, CRTC1, CRTC3, CSF1, CTLA4, CTNNB1, CTNNBL1, DDIT3, DDX3X, DDX5, DHH, DNAJB1, DUX4, EGFR, EGFRV8, ELK4, ELL, EML4, EPC1, EPS15, ERBB2, ERG, ESR1, ESRP1, ETV1, ETV4, ETV5, ETV6, EWSR1, EZR, FAM131B, FEV, FGFR1, FGFR2, FGFR3, FGFR4, FLI1, FLT3, FOXO1, FOXP1, FRK, FUS, GLI1, GLIS1, GLIS2, GLIS3, GNAS, GOPC, HAS2, HERPUD1, HEY1, HIP1, HMGA2, HMGN2P46, HNRNPA2B1, IL2RB, IRF4, ITK, JAK2, JAZF1, KAT6A, KDM5A, KIAA1549, KIF5B, KIT, KLK2, KMT2A, KNL1, KRAS, LIFR, LMNA, LPP, MAML1, MAML2, MAST1, MAST2, MEAF6, MET, MET Exon 14 skipping, MKRN1, MLLT1, MLLT10, MLLT11, MLLT3, MN1, MPRIP, MRTFB, MSH2, MYB, MYBL1, MYC, MYH9, MYLK, NAB2, NCOA1, NCOA2, NCOA4, NDRG1, NFATC2, NFIB, NOTCH1, NOTCH2, NPM1, NR4A3, NRG1, NTRK1, NTRK2, NTRK3, NUP214, NUP98, NUTM1, NUTM2A, NUTM2B, OMD, PAN3, PATZ1, PAX3, PAX7, PAX8, PBX1, PCM1, PDGFB, PDGFRA, PDGFRB, PHF1, PIK3CA, PLAG1, PML, POU5F1, PPARG, PRCC, PRKACA, PRKAR1A, PRKD1, PRKD2, PRKD3, PTPRK, RAD51B, RAF1, RANBP2, RARA, RASGEF1A, RET, RHEBL1, ROS1, RPS6KC1, RSPO3, RUNX1, RUNX1T1, SDC4, SEC31A, SEPTIN6, SEPTIN9, SET, SLC34A2, SLC45A3, SND1, SNURF, SRF, SRGAP3, SS18, SSX1, SSX2, SSX4B, STAT6, STIL, STRN, SUZ12, SYK, TACC3, TAF15, TAL1, TBL1XR1, TCF12, TCF3, TCF7L2, TEAD1, TEAD2, TEAD3, TFE3, TFG, THADA, THRAP3, TMPRSS2, TP63, TPM3, TPM4, TPR, TRIM24, UBTX, USP6, VTI1A, WDFY2, WIF1, WT1, WWTR1, YAP1, YWHAE, and ZNF444 (total 250 genes and 2 variants).

Clinical Significance

Genomic rearrangements called gene fusions are present in approximately 20-30% of all cancers. Identification of translocations can be useful for diagnosis, disease sub-classification, and therapy determination.

The Universal Solid Tumor NGS Fusion Panel detects gene fusions across multiple solid tumors, including lung, brain, breast, thyroid, salivary gland, prostate, sarcoma, colorectal, cholangiocarcinoma, and pancreas. Compared to FISH, molecular detection of gene fusions, as provided in this test, requires less tumor sample for a much broader and therefore more cost-effective screen.

This test should be considered for difficult-to-diagnose tumors of uncertain histogenesis, particularly in younger patients (<50 years of age).

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)*

81456

Medicare MoIDX CPT Code(s)*

81449

New York Approved

Yes

Level of Service

Global

Turnaround Time

21 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.

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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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