

OUR OTHER PANELS

We offer several cancer panels depending upon the needs of the Oncologists, these include..



BRCA panel for testing mutations in BRCA1 and BRCA2 genes



Lung RNA fusion panel for detecting gene fusions in major driver genes



EGFR, NRAS single gene panels



Inherited Cancer Panel (>140 genes)



Comprehensive Cancer Panel



BIOSERVE BIOTECHNOLOGIES (INDIA) PVT LTD

Unit D4-D7, 1st Floor, Industrial Estate
Moula-Ali, Medchal-Malkajgiri Dist.
Hyderabad-500040, Telangana

+91-40 2955 8178/8176

+91 912 122 9283

bioserve.india@reprocell.com

salesindia@reprocell.com

www.bioserve.in



YOKOHANA - JAPAN | GLASGOW - UK
HYDERABAD - INDIA | BELTSVILLE - USA

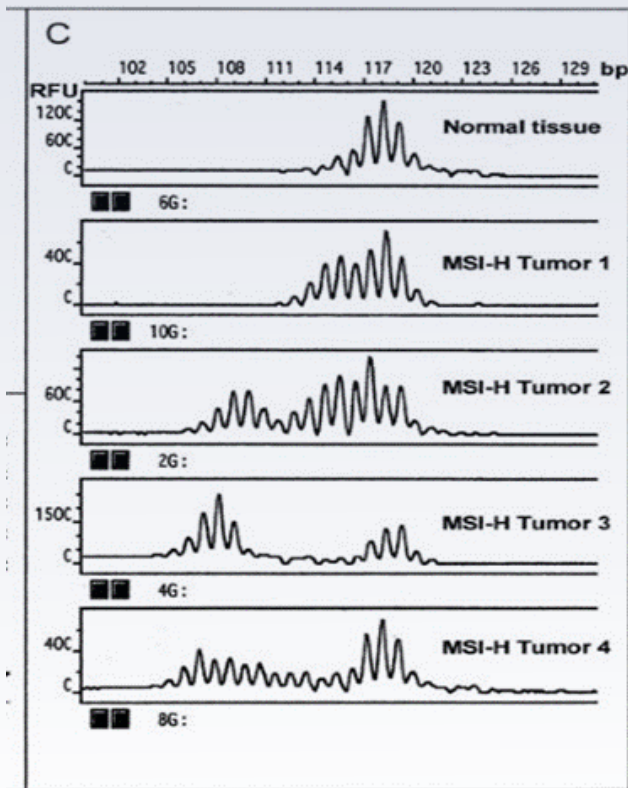


Uncovering Mutations in Tumor DNA

& providing clinically actionable data
for choice of the most optimal
treatment

INTEGRATED TUMOR PANEL +

Somatic mutations are changes that happen to the genetic information in cells after a person is conceived and therefore are not passed down from a parent. Somatic genetic tests look for gene changes only in cancer cells as it can help doctors find out more about the cancer, including information on an exact diagnosis, Information on prognosis of the cancer or If treatment options are available for cancer with that specific mutation. Somatic mutation analysis is now becoming standard practice to identify therapeutic guidance or identify therapy resistant mutations. Tumor mutation burden (TMB) and Microsatellite instability (MSI) are the latest biomarkers with prognostic value or therapy related guidance.



ADVANTAGES

- Overall variant profiling of **409 tumour suppressor genes and oncogenes frequently mutated in cancer**. Our test covers over **15500 COSMIC (Catalogue of Somatic Mutations in Cancer)** mutation targets across cancer driver genes, drug targets, signalling cascades, apoptosis, DNA repair, transcription regulators, inflammatory response, and growth factor genes in a single assay.
- Tumor load (Tumor mutation burden) (panel size 1.2 Mb). The immune checkpoint inhibitor pembrolizumab is approved for treating both adults and children with advanced cancers that have a high TMB (defined as ≥ 10 mut/Mb) after other drugs have been tried.
- Microsatellite instability (MSI) testing using **13 STR markers (including markers recommended in Bethesda panel)**. Microsatellites are regions of repeated DNA that change in length (show instability) when mismatch repair is not working properly and are major predictive and diagnostic marker in several cancers like colorectal carcinomas

SPECIMEN REQUIREMENTS

Tumour Tissue (FFPE tissue: Paraffin block is preferred; percentage of tumour in the specimen should be $\geq 30\%$) or biopsy.

GENES COVERED IN THIS PANEL

ABL1 ABL2 ACVR2A ADAMTS20 AFF1 AFF3 AKAP9 AKT1 AKT2 AKT3 ALK APC AR ARID1A ARID2 ARNT ASXL1 ATF1 ATM ATR ATRX AURKA AURKB AURKC AXL BAI3 BAP1 BCL10 BCL11A BCL11B BCL2 BCL2L1 BCL2L2 BCL3 BCL6 BCL9 BCR BIRC2 BIRC3 BIRC5 BLM BLNK BMPR1A BRAF BRD3 BRIP1 BTK BUB1B CARD11 CASCS CBL CCND1 CCND2 CCNE1 CD79A CD79B CDC73 CDH1 CDH11 CDH2 CDH20 CDH5 CDK12 CDK4 CDK6 CDK8 CDKN2A CDKN2B CDKN2C CEBA A CHEK1 CHEK2 CIC CKS1B CMPK1 COL1A1 CRBN CREB1 CREBBP CRKL CRTCI CSF1R CSMD3 CTNNA1 CTNNA1B CYLD CYP2C19 CYP2D6 DAXX DCC DDB2 DDI3 DDR2 DEK DICER1 DNMT3A DPYD DST EGFR EML4 EP300 EP400 EPHA3 EPHA7 EPHB1 EPHB4 EPHB6 ERBB2 ERBB3 ERBB4 ERCC1 ERCC2 ERCC3 ERCC4 ERCC5 ERG ESR1 ETS1 ETV1 ETV4 EXT1 EXT2 EZH2 FAM123B FANCA FANCC FANCD2 FANCF FANCG FAS FBXW7 FGFR1 FGFR2 FGFR3 FGFR4 FH FLCN FLI1 FLT1 FLT3 FLT4 FN1 FOXL2 FOXO1 FOXO3 FOXP1 FOXP4 FZR1 G6PD GATA1 GATA2 GATA3 GDNF GNA11 GNAQ GNAS GPR124 GRM8 GUCY1A2 HCAR1 HIF1A HLF HNF1A HOOK3 HRAS HSP90AA1 HSP90AB1 ICK IDH1 IDH2 IGF1R IGF2 IGF2R IKBKB IKBKE IKZF1 IL2 IL21R IL6ST IL7R ING4 IRF4 IRS2 ITGA10

ITGA9 ITGB2 ITGB3 JAK1 JAK2 JAK3 JUN KAT6A KAT6B KDM5C KDM6A KDR KEAP1 KIT KLF6 KRAS LAMP1 LCK LIFR LPHN3 POT1 LPP LRP1B LTF LTK MAF MAFB MAGEA1 MAGI1 MALT1 MAML2 MAP2K1 MAP2K2 MAP2K4 MAP3K7 MAPK1 MAPK8 MARK1 MARK4 MBD1 MCL1 MDM2 MDM4 MEN1 MET MIF MLH1 MLL MLL2 MLL3 MLLT1 MMP2 MN1 MPL MRE11A MSH2 MSH6 MTR MTRR MUC1 MUTHY MYB MYC MYCL1 MYCN MYD88 MYH11 MYH9 NBN NCOA1 NCOA2 NCOA4 NF1 NF2 NFE2L2 NFKB1 NFKB2 NIN NKX2-1 NLRP1 NOTCH1 NOTCH2 NOTCH4 NPM1 NRAS NSD1 NTRK1 NTRK3 NUMA1 NUP214 NUP98 PAK3 PALB2 PARP1 PAX3 PAX5 PAX7 PAX8 PBRM1 PBX1 PDE4DIP PDGFR PDGFRA PDGFRB PER1 PGAP3 PHOX2B PIK3C2B PIK3CA PIK3CB PIK3CD PIK3CG PIK3R1 PIK3R2 PIM1 PKHD1 PLAG1 PLCG1 PLEKHG5 PML PMS1 PMS2 POU5F1 PPARG PPP2R1A PRDM1 PRKAR1A PRKDC PSIP1 PTCH1 PTEN PTGS2 PTPN11 PTPRD PTPRT RAD50 RAF1 RALGDS RARA RB1 RECQL4 REL RET RHOH RNASEL RNF2 RNF213 ROS1 RPS6KA2 RRM1 RUNX1 RUNX1T1 SAMD9 SBDS SDHA SDHB SDHC SDHD SEPT9 SETD2 SF3B1 SGK1 SH2D1A SMAD2 SMAD4 SMARCA4 SMARCB1 SMO SMUG1 SOCS1 SOX1 SOX2 SRC SSX1 STK11 STK36 SUFU SYK SYNE1 TAF1 TAF1L TAL1 TBX22 TCF12 TCF3 TCF7L1 TCF7L2 TCL1A TET1 TET2 TFE3 TGFBR2 TGM7 THBS1 TIMP3 TLR4 TLX1 TNFAIP3 TNFRSF14 TNK2 TOP1 TP53 TPR TRIM24 TRIM33 TRIP11 TRRAP TSC1 TSC2 TSHR UBR5 UGT1A1 USP9X VHL WAS WHSC1 WRN WT1 XPA XPC XPO1 XRCC2 ZNF384 ZNF521

WHY BIOSERVE - REPROCELL INDIA?

- Clinically relevant improvements and their interpretations and links to drug efficacy.
- Recommendations for targeted therapies or possible resistance mechanisms, and the prognosis and current clinical trials.
- High precision reporting with accuracy by ensuring all the quality requirements.
- Quicker Turnaround time, Competitive pricing and detailed clinical interpretations and links to drug response/efficacy wherever possible.
- The test has been validated in house and offers coverage range of 500-1000X.