

NGS PANELS IM ANGEBOT

- OncoPrint™ BRCA Research Assay
- OncoPrint™ Focus Assay (52 Gene)
- TMB (Tumormutationslast pro Megabase, 409 Gene)

PANELS IM DETAIL (GENE UND EXONE)

OncoPrint™ BRCA Research Assay Panel

Im Panel werden alle kodierenden Abschnitte der *BRCA1* (Exone 2-24) und *BRCA2* (Exone 2-27) Gene gedeckt.

OncoPrint™ Focus Assay Panel

35 Gene, Hotspots (Exone in Klammern): *AKT1* (1, 3), *ALK* (21-25), *AR* (6,8), *BRAF* (11, 15), *CDK4* (2), *CTNNB1* (3), *DDR2* (5), *EGFR* (3, 7, 12, 15, 18, 19, 20, 21), *ERBB2* (8, 17-22), *ERBB3* (2, 3, 6, 8, 9), *ERBB4* (18), *ESR1* (9), *FGFR2* (7, 8, 9, 12, 14), *FGFR3* (7, 9, 14, 16), *GNA11* (4, 5), *GNAQ* (4, 5), *HRAS* (2, 3), *IDH1* (4), *IDH2* (4), *JAK1* (14, 15, 16), *JAK2* (14), *JAK3* (11, 12, 15), *KIT* (8, 9, 11, 13, 17), *KRAS* (2, 3, 4), *MAP2K1* (2, 3, 6), *MAP2K2* (2), *MET* (14, 16, 19), *MTOR* (30, 39, 40, 43, 47, 53), *NRAS* (2, 3, 4), *PDGFRA* (12, 14, 18), *PIK3CA* (2, 5, 6, 8, 10, 14, 19, 21), *RAF1* (7, 12), *RET* (10, 11, 13, 15, 16), *ROS1* (36, 38), *SMO* (4, 6, 8, 9).

19 Copy Number Variationen (CNV): *ALK*, *AR*, *BRAF*, *CCND1*, *CDK4*, *CDK6*, *EGFR*, *ERBB2*, *FGFR1*, *FGFR2*, *FGFR3*, *FGFR4*, *KIT*, *KRAS*, *MET*, *MYC*, *MYCN*, *PDGFRA*, *PIK3CA*.

23 Fusionsdriversgene: *ABL1*, *ALK*, *AKT3*, *AXL*, *BRAF*, *EGFR*, *ERBB2*, *ERG*, *ETV1*, *ETV4*, *ETV5*, *FGFR1*, *FGFR2*, *FGFR3*, *MET*, *NTRK1*, *NTRK2*, *NTRK3*, *PDGFRA*, *PPARG*, *RAF1*, *RET*, *ROS1*.

OncoPrint Tumor Mutation Load Assay (TMB)

Mutationsanalyse der 409 Gene:

TNFRSF14, *PLEKHG5*, *PIK3CD*, *MTOR*, *SDHB*, *PAX7*, *ARID1A*, *LCK*, *MYCL1*, *MPL*, *MUTYH*, *TAL1*, *CMPK1*, *CDKN2C*, *JUN*, *JAK1*, *BCL10*, *DPYD*, *TRIM33*, *NRAS*, *NOTCH2*, *PDE4DIP*, *ITGA10*, *BCL9*, *MCL1*, *ARNT*, *CKS1B*, *MUC1*, *NTRK1*, *SDHC*, *DDR2*, *PBX1*, *ABL2*, *RNASEL*, *RNF2*, *TPR*, *PTGS2*, *CDC73*, *PIK3C2B*, *MDM4*, *IKBKE*, *MARK1*, *PARP1*, *MTR*, *FH*, *AKT3*, *SOX11*, *MYCN*, *NCOA1*, *DNMT3A*, *ALK*, *EML4*, *MSH2*, *MSH6*, *BCL11A*, *REL*, *XPO1*, *TCF7L1*, *AFF3*, *PAX8*, *ERCC3*, *LRP1B*, *ACVR2A*, *NFE2L2*, *PMS1*, *SF3B1*, *CREB1*, *IDH1*, *ERBB4*, *FN1*, *STK36*, *PAX3*, *UGT1A1*, *CRBN*, *FANCD2*, *VHL*, *PPARG*, *RAF1*, *XPC*, *TGFBR2*, *MLH1*, *ITGA9*, *MYD88*, *CTNNB1*, *LTF*, *SETD2*, *BAP1*, *PBRM1*, *MAGI1*, *MITF*, *FOXP1*, *EPHA3*, *GATA2*, *EPHB1*, *PIK3CB*, *FOXL2*, *ATR*, *PIK3CA*, *SOX2*, *BCL6*, *LPP*, *TNK2*, *FGFR3*, *WHSC1*, *RHOH*, *PHOX2B*, *PDGFRA*, *KIT*, *KDR*, *LPHN3*, *AFF1*, *NFKB1*, *TET2*, *IL2*, *FBXW7*, *SDHA*, *MTRR*, *IL7R*, *GNDF*, *LIFR*, *IL6ST*, *PIK3R1*, *APC*, *RAD50*, *CTNNA1*, *CSF1R*, *PDGFRB*, *NPM1*, *FGFR4*, *NSD1*, *FLT4*, *IRF4*, *DEK*, *POU5F1*, *NOTCH4*, *DAXX*, *PIM1*, *FOXP4*, *HSP90AB1*, *PKHD1*, *ICK*, *DST*, *BAI3*, *MAP3K7*, *EPHA7*, *PRDM1*, *FOXO3*, *ROS1*, *SGK1*, *MYB*, *TNFAIP3*, *ESR1*, *SYNE1*, *IGF2R*, *RPS6KA2*, *CARD11*, *PMS2*, *ETV1*, *IKZF1*, *EGFR*, *SBDS*, *AKAP9*, *CDK6*, *SAMD9*, *TRRAP*, *EPHB4*, *PIK3CG*, *MET*, *POT1*, *GRM8*, *SMO*, *TRIM24*, *BRAF*, *EPHB6*, *EZH2*, *MLL3*, *XRCC2*, *WRN*, *GPR124*, *FGFR1*, *KAT6A*, *IKBKB*, *HOOK3*, *PRKDC*, *PLAG1*, *NCOA2*, *NBN*, *RUNX1T1*, *UBR5*, *CSMD3*, *EXT1*, *MYC*, *RECQL4*, *JAK2*, *PTPRD*, *PSIP1*, *CDKN2A*, *CDKN2B*, *TAF1L*, *FANCG*, *PAX5*, *GNAQ*, *SYK*, *FANCC*, *PTCH1*, *XPA*, *TLR4*, *ABL1*, *NUP214*, *TSC1*, *RALGDS*, *BRD3*, *NOTCH1*, *KLF6*, *GATA3*, *MLLT10*, *RET*, *MAPK8*, *NCOA4*, *TET1*, *KAT6B*, *BMPR1A*, *PTEN*, *FAS*, *CYP2C19*, *BLNK*, *TLX1*, *NFKB2*, *SUFU*, *TCF7L2*, *FGFR2*, *HRAS*, *IGF2*, *NUP98*, *RRM1*, *FANCF*, *WT1*, *EXT2*, *DDB2*, *MEN1*, *CCND1*, *NUMA1*, *MRE11A*, *MAML2*, *BIRC3*, *BIRC2*, *GUCY1A2*, *ATM*, *SDHD*, *MLL*, *CBL*, *CHEK1*, *ETS1*, *FLI1*, *CCND2*, *ING4*, *ZNF384*, *KRAS*, *ADAMTS20*, *ARID2*, *MLL2*, *ATF1*, *SMUG1*, *ERBB3*, *DDIT3*, *CDK4*, *MDM2*, *PTPN11*, *HNF1A*, *HCAR1*, *EP400*, *CDK8*, *FLT3*, *FLT1*, *FOXO1*, *RB1*, *ERCC5*, *IRS2*, *LAMP1*, *BCL2L2*, *NKX21*, *NIN*, *HIF1A*, *TSHR*, *TRIP11*, *DICER1*, *TCL1A*, *BCL11B*, *HSP90AA1*, *AKT1*, *THBS1*, *BUB1B*, *CASC5*, *LYN*, *TGM7*, *TCF12*, *MAP2K1*, *PML*, *NTRK3*, *IDH2*, *BLM*, *IGF1R*, *TSC2*, *CREBBP*, *SOCS1*, *ERCC4*, *MYH11*, *PALB2*, *IL21R*, *CYLD*, *MMP2*, *CDH11*, *CDH5*, *CDH1*, *MAF*, *FANCA*, *NLRP1*, *TP53*, *PER1*, *AURKB*, *MAP2K4*, *FLCN*, *NF1*, *CDK12*, *PGAP3*, *ERBB2*, *RARA*, *ETV4*, *ITGB3*, *COL1A1*, *HLF*, *FANCI*, *CD79B*, *PRKAR1A*, *43352*, *BIRC5*, *RNF213*, *ZNF521*, *CDH2*, *SMAD2*, *MBD1*, *SMAD4*, *DCC*, *MALT1*, *CDH20*, *BCL2*, *STK11*, *TCF3*, *GNA11*, *FZR1*, *MAP2K2*, *KEAP1*, *SMARCA4*, *JAK3*, *PIK3R2*, *CRTC1*, *CCNE1*, *CEBPA*, *AKT2*, *AXL*, *CD79A*, *CIC*, *BCL3*, *MARK4*, *ERCC2*, *ERCC1*, *PPP2R1A*, *AURKC*, *BCL2L1*, *ASXL1*, *SRC*, *MAFB*, *TOP1*, *PLCG1*, *PTPRT*, *AURKA*, *GNAS*, *RUNX1*, *ERG*, *ITGB2*, *CRKL*, *MAPK1*, *BCR*, *SMARCB1*, *MN1*, *CHEK2*, *NF2*, *TIMP3*, *MYH9*, *PDGFB*, *EP300*, *CYP2D6*, *USP9X*, *KDM6A*, *SSX1*, *WAS*, *GATA1*, *TFE3*, *KDM5C*, *FAM123B*, *AR*, *TAF1*, *ATRX*, *TBX22*, *BTK*, *PAK3*, *SH2D1A*, *MAGEA1*, *G6PD*.