

Gene und Exone der Panel

1. Oncomine™ Precision Assay DNA (46 Gene)
2. Oncomine™ Precision Assay RNA (18 Gene)
3. Oncomine™ Solid Tumor DNA Panel (22 Gene) - CE IVD
4. Oncomine™ Comprehensive Assay v3 - DNA (146 Gene)
5. Oncomine™ Comprehensive Assay v3 - RNA (51 Gene)
6. Oncomine™ Comprehensive Assay Plus - DNA (498 Gene - TMB/ Tumormutationslast)
7. Oncomine™ Focus Panel DNA (35 Gene)
8. Oncomine™ Focus Panel RNA (23 Gene)
9. Oncomine™ Lung Cell-Free Total Nucleic Acid Assay (11 Gene)
10. Oncomine™ Colon cfDNA Assay (14 Gene)
11. Oncomine™ Breast cfDNA Research Assay v2 (10 Gene)
12. Oncomine™ Pan-cancer Cell-Free Assay (44 Gene)
13. BRCAness HRR/BRCAness HRR Prostate Custom Panel (55 Gene)
14. Melanoma Custom Panel (33 Gene)
15. Lymphoma Custom Panel (68 Gene)
16. Oncomine™ Childhood Cancer Assay - DNA (136 Gene)
17. Oncomine™ Childhood Cancer Assay - RNA (91 Gene)
18. Oncomine™ BRCA1 and BRCA2 Panel (Komplette Abdeckung der BRCA1/2 Gene)
19. Archer™ RNA Fusion Custom Panel (Archer™ Fusion Plex™ Sarcoma - 63 Gene)

1. Oncomine™ Precision Assay - DNA

Abgedeckte Hotspots in folgenden Genen (45)

| | | | | | | |
|--------------------------------------|--|--|---|---|---|-----------------------------------|
| AKT1 <i>Exone 3, 4</i> | CDK4 <i>Exon 2</i> | ERBB4 <i>Exon 18</i> | GNA11 <i>Exone 4-5</i> | KRAS <i>Exone 2-4</i> | NTRK2 <i>Exone 18-19</i> | ROS1 <i>Exone 36-38</i> |
| AKT2 <i>Exone 3, 11</i> | CDKN2A <i>Exone 2</i> | ESR1 <i>Exone 5-6, 8-9</i> | GNAQ <i>Exone 4-5</i> | MAP2K1 <i>Exone 2-3, 6</i> | NTRK3 <i>Exone 16-17</i> | SMO <i>Exone 6, 8-9</i> |
| AKT3 <i>Exone 3, 4</i> | CHEK2 <i>Exone 11, 15</i> | FGFR1 <i>Exone 14-15</i> | GNAS <i>Exone 8-9</i> | MAP2K2 <i>Exone 2-3</i> | PDGFRA <i>Exone 11-12, 14, 18</i> | TP53 <i>Exone 5-8</i> |
| ALK <i>Exone 21-26, 29</i> | CTNNB1 <i>Exone 3, 7</i> | FGFR2 <i>Exone 7-9, 12-15</i> | HRAS <i>Exone 2-3</i> | MET <i>Exone 14, 16</i> | PIK3CA <i>Exone 2-3, 5, 8, 10, 21</i> | |
| AR <i>Exone 4-6, 8</i> | EGFR <i>Exone 1, 3, 7, 12, 15, 18-21</i> | FGFR3 <i>Exone 7, 9, 13-16</i> | IDH1 <i>Exone 4, 7</i> | MTOR <i>Exone 30, 39-40, 43, 45, 47, 53</i> | PTEN <i>Exone 1-2, 4-6, 8-9</i> | |
| ARAF <i>Exon 7</i> | ERBB2 <i>Exone 8, 17-22</i> | FGFR4 <i>Exon 13</i> | IDH2 <i>Exone 4, 7</i> | NRAS <i>Exone 2-4</i> | RAF1 <i>Exon 7</i> | |
| BRAF <i>Exone 11, 15</i> | ERBB3 <i>Exone 2-3, 7-9</i> | FLT3 <i>Exon 20</i> | KIT <i>Exone 8-11, 13-14, 17-18</i> | NTRK1 <i>Exone 14-15</i> | RET <i>Exone 10-11, 13-16</i> | |

Kopienzahlveränderungen in folgenden Genen (14)

| | | | | | | |
|------------|---------------|--------------|--------------|--------------|-------------|---------------|
| ALK | CD274 | EGFR | ERBB3 | FGFR2 | KRAS | PIK3CA |
| AR | CDKN2A | ERBB2 | FGFR1 | FGFR3 | MET | PTEN |

2. Oncomine™ Precision Assay - RNA

Genfusionen (18)

| | | | | | | |
|-------------|--------------|--------------|--------------|--------------|-------------|--------------|
| ALK | EGFR | FGFR2 | NRG1 | NTRK3 | RET | RSPO2 |
| AR | ESR1 | FGFR3 | NTRK1 | NUTM1 | ROS1 | RSPO3 |
| BRAF | FGFR1 | MET | NTRK2 | | | |

3. Oncomine™ Solid Tumor DNA Panel - CE IVD

Abgedeckte Hotspots in folgenden Genen (22)

| | | | | | | |
|-----------------------------------|--|-----------------------------------|---|--------------------------------------|--|------------------------------------|
| AKT1 Exon 3 | DDR2 Exone 5, 8, 12-15, 17 | FBXW7 Exone 5, 8-11 | FGFR3 Exone 7, 9, 14, 16, 18 | MET Exone 2, 14, 16, 19 | PIK3CA Exone 10, 14, 21 | STK11 Exone 1, 4-6 |
| ALK Exone 22, 23, 25 | EGFR Exone 12, 18-21 | FGFR1 Exone 4, 7 | KRAS Exone 2-4 | NOTCH1 Exone 26, 27 | PTEN Exone 1, 3, 6, 7, 8 | TP53 Exone 2, 4-8, 10 |
| BRAF Exone 11, 15 | ERBB2 Exone 19, 20, 21 | FGFR2 Exone 7, 9, 12 | MAP2K1 Exon 2 | NRAS Exone 2-4 | SMAD4 Exone 3, 5, 6, 8-12 | |
| CTNNB1 Exon 3 | ERBB4 Exone 3, 4, 6-9, 15, 23 | | | | | |

4. OncoPrint™ Comprehensive Assay v3 - DNA

Abgedeckte Hotspots in folgenden Genen (87)

| | | | | | | |
|-------|--------|----------|--------|--------|---------|-------|
| AKT1 | CHEK2 | FGFR3 | IDH2 | MAX | PDGFRA | SMAD4 |
| AKT2 | CSF1R | FGFR4 | JAK1 | MDM4 | PDGFRB | SMO |
| AKT3 | CTNNB1 | FLT3 | JAK2 | MED12 | PIK3CB | SPOP |
| ALK | DDR2 | FOXL2 | JAK3 | MET | PIK3CA | SRC |
| AR | EGFR | GATA2 | KDR | MTOR | PPP2R1A | STAT3 |
| ARAF | ERBB2 | GNA11 | KIT | MYC | PTPN11 | TERT |
| AXL | ERBB3 | GNAQ | KNSTRN | MYCN | RAC1 | TOP 1 |
| BRAF | ERBB4 | GNAS | KRAS | MYD88 | RAF1 | U2AF1 |
| BTK | ERCC2 | H3F3A | MAGOH | NFE2L2 | RET | XPO1 |
| CBL | ESR1 | HIST1H3B | MAP2K1 | NRAS | RHEB | |
| CCND1 | EZH2 | HNF1A | MAP2K2 | NTRK1 | RHOA | |
| CDK4 | FGFR1 | HRAS | MAP2K4 | NTRK2 | ROS1 | |
| CDK6 | FGFR2 | IDH1 | MAPK1 | NTRK3 | SF3B1 | |

Komplett abgedeckte Gene (48)

| | | | | | | |
|--------|--------|--------|--------|--------|--------|---------|
| ARID1A | CDK12 | FANCD2 | NBN | PIK3R1 | RAD51B | SMARCA4 |
| ATM | CDKN1B | FANCI | NF1 | PMS2 | RAD51C | SMARCB1 |
| ATR | CDKN2A | FBXW7 | NF2 | POLE | RAD51D | STK11 |
| ATRX | CDKN2B | MLH1 | NOTCH1 | PTCH1 | RNF43 | TP53 |
| BAP1 | CHEK1 | MRE11 | NOTCH2 | PTEN | RB1 | TSC1 |
| BRCA1 | CREBBP | MSH6 | NOTCH3 | RAD50 | SETD2 | TSC2 |
| BRCA2 | FANCA | MSH2 | PALB2 | RAD51 | SLX4 | |

Kopienzahlveränderungen in folgenden Genen (43)

| | | | | | | |
|------|-------|-------|-------|-------|--------|------|
| AKT1 | CCND1 | EGFR | FGFR3 | MDM4 | NTRK3 | TERT |
| AKT2 | CCND2 | ERBB2 | FGFR4 | MET | PDGFRA | |
| AKT3 | CCND3 | ESR1 | FLT3 | MYC | PDGFRB | |
| ALK | CCNE1 | FGF19 | IGF1R | MYCL | PIK3CB | |
| AXL | CDK2 | FGF3 | KIT | MYCN | PIK3CA | |
| AR | CDK4 | FGFR1 | KRAS | NTRK1 | PPARG | |
| BRAF | CDK6 | FGFR2 | MDM2 | NTRK2 | RICTOR | |

5. Oncomine™ Comprehensive Assay v3 - RNA

Genfusionen (51)

| | | | | | | |
|--------|-------|-------|--------|--------|--------|-------|
| AKT2 | EGFR | FGFR1 | MET | NTRK2 | PTEN | RSPO2 |
| ALK | ERBB2 | FGFR2 | MYB | NTRK3 | PPARG | RSPO3 |
| AR | ERBB4 | FGFR3 | MYBL1 | NUTM1 | RAD51B | TERT |
| AXL | ERG | FGR | NF1 | PDGFRA | RAF1 | |
| BRCA1 | ESR1 | FLT3 | NOTCH1 | PDGFRB | RB1 | |
| BRCA2 | ETV1 | JAK2 | NOTCH4 | PIK3CA | RELA | |
| BRAF | ETV4 | KRAS | NRG1 | PRKACA | RET | |
| CDKN2A | ETV5 | MDM4 | NTRK1 | PRKACB | ROS1 | |

6. OncoPrint™ Comprehensive Assay Plus

| Abgedeckte Hotspots in folgenden Genen (168) | | | | | | |
|--|---------|-----------|--------|---------|---------|--------|
| ABL1 | CCND1 | FAM135B | IDH2 | MPL | PIM1 | SMC1A |
| ABL2 | CCND2 | FGF7 | IKBKB | MTOR | PLCG1 | SMO |
| ACVR1 | CCND3 | FGFR1 | IL6ST | MYC | PPP2R1A | SNCAIP |
| AKT1 | CCNE1 | FGFR2 | IL7R | MYCN | PPP6C | SOS 1 |
| AKT2 | CD79B | FGFR3 | IRF4 | MYD88 | PRKACA | SOX2 |
| AKT3 | CDK4 | FGFR4 | IRS4 | MYOD1 | PTPN11 | SPOP |
| ALK | CDK6 | FLT3 | KCNJ5 | NFE2L2 | PTPRD | SRC |
| AR | CHD4 | FLT4 | KDR | NRAS | PXDNL | SRSF2 |
| ARAF | CSF1R | FOXA1 | KIT | NSD2 | RAC1 | STAT3 |
| ATP1A1 | CTNNB1 | FOXL2 | KLF4 | NT5C2 | RAF1 | STAT5B |
| AURKA | CUL1 | FOXO1 | KLF5 | NTRK1 | RARA | STAT6 |
| AURKB | CYSLTR2 | GATA2 | KNSTRN | NTRK2 | RET | TAF1 |
| AURKC | DDR2 | GLI1 | KRAS | NTRK3 | RGS7 | TERT |
| AXL | DGCR8 | GNA11 | MAGOH | NUP93 | RHEB | TGFBR1 |
| BCL2 | DROSHA | GNAQ | MAP2K1 | PAX5 | RHOA | TOP 1 |
| BCL2L12 | E2F1 | GNAS | MAP2K2 | PCBP1 | RICTOR | TPMT |
| BCL6 | EGFR | H3F3A | MAPK1 | PDGFRA | RIT1 | TRRAP |
| BCR | EIF1AX | H3F3B | MAX | PDGFRB | ROS1 | TSHR |
| BMP5 | EPAS1 | HIF1A | MDM4 | PIK3C2B | RPL10 | U2AF1 |
| BRAF | ERBB2 | HIST1H1E | MECOM | PIK3CA | SETBP1 | USP8 |
| BTK | ERBB3 | HIST1H2BD | MED12 | PIK3CB | SF3B1 | WAS |
| CACNA1D | ERBB4 | HIST1H3B | MEF2B | PIK3CD | SIX1 | XPO1 |
| CARD11 | ESR1 | HRAS | MET | PIK3CG | SIX2 | ZNF217 |
| CBL | EZH2 | IDH1 | MITF | PIK3R2 | SLCO1B3 | ZNF429 |

Komplett abgedeckte Gene (227)

| | | | | | | |
|----------|---------|--------|--------|----------|----------|----------|
| ABRAXAS1 | CDC73 | EP300 | JAK1 | NF2 | RAD50 | SPEN |
| ACVR1B | CDH1 | EPCAM | JAK2 | NOTCH1 | RAD51 | STAG2 |
| ACVR2A | CDH10 | EPHA2 | JAK3 | NOTCH2 | RAD51B | STAT1 |
| ADAMTS12 | CDK12 | ERAP1 | KDM5C | NOTCH3 | RAD51C | STK11 |
| ADAMTS2 | CDKN1A | ERAP2 | KDM6A | NOTCH4 | RAD51D | SUFU |
| AMER1 | CDKN1B | ERCC2 | KEAP1 | PALB2 | RAD52 | TAP1 |
| APC | CDKN2A | ERCC4 | KLHL13 | PARP1 | RAD54L | TAP2 |
| ARHGAP35 | CDKN2B | ERCC5 | KMT2A | PARP2 | RASA1 | TBX3 |
| ARID1A | CDKN2C | ERRFI1 | KMT2B | PARP3 | RASA2 | TCF7L2 |
| ARID1B | CHEK1 | ETV6 | KMT2C | PARP4 | RB1 | TET2 |
| ARID2 | CHEK2 | FANCA | KMT2D | PBRM1 | RBM10 | TGFBR2 |
| ARID5B | CIC | FANCC | LARP4B | PDCD1 | RECQL4 | TMEM132D |
| ASXL1 | CIITA | FANCD2 | LATS1 | PDCD1LG2 | RNASEH2A | TNFAIP3 |
| ASXL2 | CREBBP | FANCE | LATS2 | PDIA3 | RNASEH2B | TNFRSF14 |
| ATM | CSMD3 | FANCF | MAP2K4 | PGD | RNASEH2C | TP53 |
| ATR | CTCF | FANCG | MAP2K7 | PHF6 | RNF43 | TP63 |
| ATRX | CTLA4 | FANCI | MAP3K1 | PIK3R1 | RPA1 | TPP2 |
| AXIN1 | CUL3 | FANCL | MAP3K4 | PMS1 | RPL22 | TSC1 |
| AXIN2 | CUL4A | FANCM | MAPK8 | PMS2 | RPL5 | TSC2 |
| B2M | CUL4B | FAS | MEN1 | POLD1 | RUNX1 | UGT1A1 |
| BAP1 | CYLD | FAT1 | MGA | POLE | RUNX1T1 | USP9X |
| BARD1 | CYP2C9 | FBXW7 | MLH1 | POT1 | SDHA | VHL |
| BCOR | CYP2D26 | FUBP1 | MLH3 | PPM1D | SDHB | WT1 |
| BLM | DAXX | GATA3 | MRE11 | PPP2R2A | SDHC | XRCC2 |
| BMPR2 | DDX3X | GNA13 | MSH2 | PRDM1 | SDHD | XRCC3 |
| BRCA1 | DICER1 | GPS2 | MSH3 | PRDM9 | SETD2 | ZBTB20 |
| BRCA2 | DNMT3A | HDAC2 | MSH6 | PRKAR1A | SLX4 | ZFHX3 |
| BRIP1 | DOCK3 | HDAC9 | MTAP | PSMB10 | SMAD2 | ZMYM3 |
| CALR | DPYD | HLA-A | MTUS2 | PSMB8 | SMAD4 | ZRSR2 |
| CASP8 | DSC1 | HLA-B | MUTYH | PSMB9 | SMARCA4 | |
| CBFB | DSC3 | HNF1A | NBN | PTCH1 | SMARCB1 | |
| CD274 | ELF3 | ID3 | NCOR1 | PTEN | SOCS1 | |
| CD276 | ENO1 | INPP4B | NF1 | PTPRT | SOX9 | |

Kopienzahlveränderungen in folgenden Genen (333)

| | | | | | | |
|----------|--------|---------|--------|----------|----------|----------|
| ABCB1 | CCND1 | EPHA2 | HLA-A | MSH3 | PPP2R1A | SMAD4 |
| ABL1 | CCND2 | ERAP1 | HLA-B | MSH6 | PPP2R2A | SMARCA4 |
| ABL2 | CCND3 | ERAP2 | HNF1A | MTAP | PPP6C | SMARCB1 |
| ABRAXAS1 | CCNE1 | ERBB2 | IDH2 | MTOR | PRDM1 | SMC1A |
| ACVR1B | CD274 | ERBB3 | IGF1R | MUTYH | PRDM9 | SMO |
| ACVR2A | CD276 | ERBB4 | IKBKB | MYC | PRKACA | SOX9 |
| ADAMTS12 | CDC73 | ERCC2 | IL7R | MYCL | PRKAR1A | SPEN |
| ADAMTS2 | CDH1 | ERCC4 | INPP4B | MYCN | PTCH1 | SPOP |
| AKT1 | CDH10 | ERRFI1 | JAK1 | MYD88 | PTEN | SRC |
| AKT2 | CDK12 | ESR1 | JAK2 | NBN | PTPN11 | STAG2 |
| AKT3 | CDK4 | ETV6 | JAK3 | NCOR1 | PTPRT | STAT3 |
| ALK | CDK6 | EZH2 | KDM5C | NF1 | PXDNL | STAT6 |
| AMER1 | CDKN1A | FAM135B | KDM6A | NF2 | RAC1 | STK11 |
| APC | CDKN1B | FANCA | KDR | NFE2L2 | RAD50 | SUFU |
| AR | CDKN2A | FANCC | KEAP1 | NOTCH1 | RAD51 | TAP1 |
| ARAF | CDKN2B | FANCD2 | KIT | NOTCH2 | RAD51B | TAP2 |
| ARHGAP35 | CDKN2C | FANCE | KLF5 | NOTCH3 | RAD51C | TBX3 |
| ARID1A | CHD4 | FANCF | KMT2A | NOTCH4 | RAD51D | TCF7L2 |
| ARID1B | CHEK1 | FANCG | KMT2B | NRAS | RAD52 | TERT |
| ARID2 | CHEK2 | FANCI | KMT2C | NTRK1 | RAD54L | TET2 |
| ARID5B | CIC | FANCL | KMT2D | NTRK3 | RAF1 | TGFBR2 |
| ASXL1 | CREBBP | FANCM | KRAS | PALB2 | RARA | TNFAIP3 |
| ASXL2 | CSMD3 | FAT1 | LARP4B | PARP1 | RASA1 | TNFRSF14 |
| ATM | CTCF | FBXW7 | LATS1 | PARP2 | RASA2 | TOP 1 |
| ATR | CTLA4 | FGF19 | LATS2 | PARP3 | RB1 | TP53 |
| ATRX | CTNND2 | FGF23 | MAGOH | PARP4 | RBM10 | TP63 |
| AURKA | CUL3 | FGF3 | MAP2K1 | PBRM1 | RECQL4 | TPMT |
| AURKC | CUL4A | FGF4 | MAP2K4 | PCBP1 | RET | TPP2 |
| AXIN1 | CUL4B | FGF9 | MAP2K7 | PDCD1 | RHEB | TSC1 |
| AXIN2 | CYLD | FGFR1 | MAP3K1 | PDCD1LG2 | RICTOR | TSC2 |
| AXL | CYP2C9 | FGFR2 | MAP3K4 | PDGFRA | RIT1 | U2AF1 |
| B2M | DAXX | FGFR3 | MAPK1 | PDGFRB | RNASEH2A | USP8 |
| BAP1 | DDR1 | FGFR4 | MAPK8 | PDIA3 | RNASEH2B | USP9X |
| BARD1 | DDR2 | FLT3 | MAX | PGD | RNF43 | VHL |
| BCL2 | DDX3X | FLT4 | MCL1 | PHF6 | ROS1 | WT1 |

| | | | | | | |
|---------|--------|-------|-------|---------|---------|--------|
| BCL2L12 | DICER1 | FOXA1 | MDM2 | PIK3C2B | RPA1 | XPO1 |
| BCL6 | DNMT3A | FUBP1 | MDM4 | PIK3CA | RPS6KB1 | XRCC2 |
| BCOR | DOCK3 | FYN | MECOM | PIK3CB | RPTOR | XRCC3 |
| BLM | DPYD | GATA2 | MEF2B | PIK3R1 | RUNX1 | YAP1 |
| BMPR2 | DSC1 | GATA3 | MEN1 | PIK3R2 | SDHA | YES1 |
| BRAF | DSC3 | GLI3 | MET | PIM1 | SDHB | ZFHX3 |
| BRCA1 | EGFR | GNA13 | MGA | PLCG1 | SDHD | ZMYM3 |
| BRCA2 | EIF1AX | GNAS | MITF | PMS1 | SETBP1 | ZNF217 |
| BRIP1 | ELF3 | GPS2 | MLH1 | PMS2 | SETD2 | ZNF429 |
| CARD11 | EMSY | H3F3A | MLH3 | POLD1 | SF3B1 | ZRSR2 |
| CASP8 | ENO1 | H3F3B | MPL | POLE | SLCO1B3 | |
| CBFB | EP300 | HDAC2 | MRE11 | POT1 | SLX4 | |
| CBL | EPCAM | HDAC9 | MSH2 | PPM1D | SMAD2 | |

Zusätzlich eingeschlossene Gene für die Bestimmung der Tumormutationslast (74)

| | | | | | | |
|--------|---------|----------|--------|--------|-----------|---------|
| A1CF | CD163 | HCN1 | NOL4 | OR2T4 | OR6F1 | PPFIA2 |
| ACSM2B | CNTN6 | HLA-C | NRXN1 | OR2W3 | OR8H2 | RBP3 |
| ADAM18 | CNTNAP4 | KCND2 | NYAP2 | OR4A15 | OR8I2 | REG1A |
| ANO4 | CNTNAP5 | KCNH7 | OR10G8 | OR4C15 | OR8U1 | REG1B |
| ARMC4 | COL11A1 | KEL | OR2G6 | OR4C6 | ORC4 | REG3A |
| BRINP3 | CYP2D6 | KIR3DL1 | OR2L13 | OR4M1 | PAK5 | REG3G |
| C6 | DCAF4L2 | KRTAP2-1 | OR2L2 | OR4M2 | PCDH17 | RPTN |
| C8A | DCDC1 | KRTAP6-2 | OR2L8 | OR5D18 | PDE1A | RUNDC3B |
| C8B | GALNT17 | LRRC7 | OR2M3 | OR5F1 | PDE1C | |
| CANX | GPR158 | MARCO | OR2T3 | OR5L1 | PLXDC2 | |
| CASR | GRID2 | NLRC5 | OR2T33 | OR5L2 | POM121L12 | |

7. Oncomine™ Focus Assay - DNA

Abgedeckte Hotspots in folgenden Genen (35)

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

Kopienzahlveränderungen in folgenden Genen (20)

| | | | | | | |
|------|-------|-------|-------|-------|------|--------|
| AKT1 | BRAF | CDK6 | FGFR1 | FGFR4 | MET | PDGFRA |
| ALK | CCND1 | EGFR | FGFR2 | KIT | MYC | PIK3CA |
| AR | CDK4 | ERBB2 | FGFR3 | KRAS | MYCN | |

8. Oncomine™ Focus Assay - RNA

Genfusionen (23)

| | | | | | | |
|------|-------|------|-------|-------|--------|------|
| ABL1 | BRAF | ETV1 | FGFR1 | MET | NTRK3 | RAF1 |
| AKT3 | EGFR | ETV4 | FGFR2 | NTRK1 | PDGFRA | RET |
| ALK | ERBB2 | ETV5 | FGFR3 | NTRK2 | PPARG | ROS1 |
| AXL | ERG | | | | | |

Oncomine™ Cell-Free Assays

9. Oncomine™ Lung Cell-Free Total Nucleic Acid Assay (11 Gene): >150 Hotspots

10. Oncomine™ Colon cfDNA Assay (14 Gene): >240 Hotspots

11. Oncomine™ Breast cfDNA Research Assay v2 (10 Gene): >150 Hotspots

12. Oncomine™ Pan-cancer Cell-Free Assay (44 Gene): >900 Hotspots

| Lung cfDNA | Colon cfDNA | Breast cfDNA | Pan-cancer cfDNA | | | |
|------------|-------------|--------------|------------------|-------|--------|--------|
| ALK | AKT1 | AKT1 | AKT1 | ERBB3 | HRAS | NTRK3 |
| BRAF | APC | EGFR | ALK | ESR1 | IDH1 | PDGFRA |
| EGFR | BRAF | ERBB2 | APC | FBXW7 | IDH2 | PIK3CA |
| ERBB2 | CTNNB1 | ERBB3 | AR | FGFR1 | KIT | PTEN |
| KRAS | EGFR | ESR1 | ARAF | FGFR2 | KRAS | RAF1 |
| MAP2K1 | ERBB2 | FBXW7 | BRAF | FGFR3 | MAP2K1 | RET |
| MET | FBXW7 | KRAS | CHEK2 | FGFR4 | MAP2K2 | ROS1 |
| NRAS | GNAS | PIK3CA | CTNNB1 | FLT3 | MET | SF3B1 |
| PIK3CA | KRAS | SF3B1 | DDR2 | GNA11 | MTOR | SMAD4 |
| ROS1 | MAP2K1 | TP53 | EGFR | GNAQ | NRAS | SMO |
| TP53 | NRAS | | ERBB2 | GNAS | NTRK1 | TP53 |
| | PIK3CA | | | | | |
| | SMAD4 | | | | | |
| | TP53 | | | | | |

13. BRCAness HRR (Homologous Recombination Repair)/ BRCAness HRR Prostate Custom Panel (55 Gene)

Abgedeckte Hotspots in folgenden Genen (16)

| | | | | | | |
|------|--------|-------|-------|------|-------|------|
| AKT1 | CTNNB1 | FGFR3 | FOXA1 | IDH1 | KRAS | MET |
| AR | ERBB2 | FGFR4 | HRAS | IDH2 | MED12 | SPOP |
| BRAF | FGFR2 | | | | | |

Komplett abgedeckte Gene (39)

| | | | | | | |
|-------|--------|--------|-------|---------|--------|-------|
| APC | BRCA1 | CHEK2 | FANCG | NBN | RAD50 | RB1 |
| ATM | BRCA2 | FANCA | FANCL | PALB2 | RAD51 | SMAD4 |
| ATR | BRIP1 | FANCC | KDM6A | PIK3CA | RAD51B | TP53 |
| ATRX | CDK12 | FANCD2 | KMT2D | PIK3R1 | RAD51C | |
| BAP1 | CDKN2A | FANCE | MRE11 | PPP2R2A | RAD51D | |
| BARD1 | CHEK1 | FANCF | MYC | PTEN | RAD54L | |

14. Melanoma Custom Panel

Abgedeckte Hotspots in folgenden Genen (17)

| | | | | | | |
|-------|--------|------|------|--------|------|-------|
| AKT3 | CTNNB1 | GNAQ | KIT | MAP2K1 | NRAS | MTOR |
| BRAF | ERBB4 | HRAS | KRAS | MITF | RAC1 | SF3B1 |
| CCND1 | GNA11 | IDH1 | | | | |

Komplett abgedeckte Gene (16)

| | | | | | | |
|-------|--------|--------|--------|-------|------|------|
| ARID2 | CDKN2A | GRIN2A | NF1 | PPP6C | RB1 | TP53 |
| BAP1 | EIF1AX | MDM2 | PIK3CA | PTEN | TERT | TYR |
| CDK4 | EZH2 | | | | | |

15. Lymphoma Custom Panel

Abgedeckte Hotspots in folgenden Genen (48)

| | | | | | | |
|---------|--------|-------|--------|--------|--------|-------|
| BCL10 | CD79A | FBXW7 | JAK2 | MLL3 | PIK3CD | STAT3 |
| BCL2L11 | CD79B | FLT3 | JAK3 | MTOR | PIK3R1 | STAT6 |
| BCL6 | CELSR2 | FOXO1 | KIT | MYD88 | PTPN11 | TET2 |
| BRAF | CREBBP | IDH1 | KLHL6 | NOTCH1 | RELN | TLN2 |
| CALR | DNMT3A | IDH2 | KRAS | NOTCH2 | RHOA | U2AF1 |
| CARD11 | EP300 | IKZF3 | MAP2K1 | NRAS | SF3B1 | XPO1 |
| CCND1 | EZH2 | IRF4 | MCL1 | PIK3CA | SGK1 | |

Komplett abgedeckte Gene (20)

| | | | | | | |
|------|--------|----------|-------|-------|-------|---------|
| ATM | BTG1 | GNA13 | KMT2D | PAX5 | PTEN | TNFAIP3 |
| B2M | CDKN2A | HIST1H1C | MEF2B | PIM1 | PTPN1 | TP53 |
| BCL2 | EBF1 | IKZF1 | MYC | PRDM1 | SOCS1 | |

16. Oncomine™ Childhood Cancer Assay - DNA

Abgedeckte Hotspots in folgenden Genen (86)

| | | | | | | |
|-------|--------|-------|----------|--------|--------|--------|
| ABL1 | CDK4 | ERBB4 | HDAC9 | MAP2K1 | PAX5 | SH2D1A |
| ABL2 | CIC | ESR1 | HIST1H3B | MAP2K2 | PDGFRA | SMO |
| ACVR1 | CREBBP | EZH2 | HRAS | MET | PDGFRB | STAT3 |
| AKT1 | CRLF2 | FASLG | IDH1 | MPL | PIK3CA | STAT5B |
| ALK | CSF1R | FBXW7 | IDH2 | MSH6 | PIK3R1 | TERT |
| ASXL1 | CSF3R | FGFR1 | IL7R | MTOR | PPM1D | TPMT |
| ASXL2 | CTNNB1 | FGFR2 | JAK1 | MYC | PTPN11 | USP7 |
| BRAF | DAXX | FGFR3 | JAK2 | MYCN | RAF1 | ZMYM3 |
| CALR | DNMT3A | FLT3 | JAK3 | NCOR2 | RET | |
| CBL | EGFR | GATA2 | KDM4C | NOTCH1 | RHOA | |
| CCND1 | EP300 | GNA11 | KDR | NPM1 | SETBP1 | |
| CCND3 | ERBB2 | GNAQ | KIT | NRAS | SETD2 | |
| CCR5 | ERBB3 | H3F3A | KRAS | NT5C2 | SH2B3 | |

Komplett abgedeckte Gene (44)

| | | | | | | |
|--------|--------|-------|-------|---------|-------|------|
| APC | CHD7 | GATA1 | MYOD1 | PTEN | SUZ12 | WT1 |
| ARID1A | CRLF1 | GATA3 | NF1 | RB1 | TCF3 | XIAP |
| ARID1B | DDX3X | GNA13 | NF2 | RUNX1 | TET2 | |
| ATRX | DICER1 | ID3 | PHF6 | SMARCA4 | TP53 | |
| CDKN2A | EBF1 | IKZF1 | PRPS1 | SMARCB1 | TSC1 | |
| CDKN2B | EED | KDM6A | PSMB5 | SOCS2 | TSC2 | |
| CEBPA | FAS | KMT2D | PTCH1 | SUFU | WHSC1 | |

Kopienzahlveränderungen in folgenden Genen (27)

| | | | | | | |
|-------|-------|-------|-------|------|------|--------|
| ABL2 | CDK4 | FGFR1 | GLI1 | JAK2 | MDM2 | MYCN |
| ALK | CDK6 | FGFR2 | GLI2 | JAK3 | MDM4 | PDGFRA |
| BRAF | ERBB2 | FGFR3 | IGF1R | KIT | MET | PIK3CA |
| CCND1 | ERBB3 | FGFR4 | JAK1 | KRAS | MYC | |

17. OncoPrint™ Childhood Cancer Assay - RNA

| Genfusionen (91) | | | | | | |
|------------------|--------|--------|--------|--------|---------|---------|
| ABL1 | CSF1R | HMGA2 | MKL1 | NR4A3 | PDGFRB | STAT6 |
| ABL2 | DUSP22 | JAK2 | MLLT10 | NTRK1 | PLAG1 | TAL1 |
| AFF3 | EGFR | KAT6A | MN1 | NTRK2 | RAF1 | TCF3 |
| ALK | ETV6 | KMT2A | MYB | NTRK3 | RANBP17 | TFE3 |
| BCL11B | EWSR1 | KMT2B | MYBL1 | NUP214 | RARA | TP63 |
| BCOR | FGFR1 | KMT2C | MYH11 | NUP98 | RECK | TSLP |
| BCR | FGFR2 | KMT2D | MYH9 | NUTM1 | RELA | TSPAN4 |
| BRAF | FGFR3 | LMO2 | NCOA2 | NUTM2B | RET | UBTF |
| CAMTA1 | FLT3 | MAML2 | NCOR1 | PAX3 | ROS1 | USP6 |
| CCND1 | FOSB | MAN2B1 | NOTCH1 | PAX5 | RUNX1 | WHSC1 |
| CIC | FUS | MECOM | NOTCH2 | PAX7 | SS18 | YAP1 |
| CREBBP | GLI1 | MEF2D | NOTCH4 | PDGFB | SSBP2 | ZMYND11 |
| CRLF2 | GLIS2 | MET | NPM1 | PDGFRA | STAG2 | ZNF384 |

19. Sarkom Rearrangement Panel (Archer™ Fusion Plex™ Sarcoma)

| Genfusionen (63) | | | | | | |
|------------------|-------|-------|---------|--------|--------|---------|
| ACVR2A | EPC1 | FOS | MAML2 | NFATC2 | PHF1 | SS18 |
| ALK | ERG | FOSB | MEAF6 | NOTCH1 | PIK3CA | STAT6 |
| BCOR | ETV1 | FOXO1 | MET | NRG1 | PLAG1 | TAF15 |
| BRAF | EWSR1 | FUS | MGEA5 | NTRK1 | PPARG | TCF12 |
| CAMTA1 | FGF1 | GLI1 | MKL2 | NTRK2 | PRKD1 | TFE3 |
| CCNB3 | FGFR1 | GRM1 | MSANTD3 | NTRK3 | RAF1 | TFG |
| CIC | FGFR2 | HMGA2 | MYBL1 | NUTM1 | RET | TMPRSS2 |
| CSF1 | FGFR3 | IGF1R | MYB | PAX5 | ROS1 | USP6 |
| EGFR | FGR | JAZF1 | NCOA2 | PDGFB | SRF | YWHAE |