ANA LYSEN

Molekularpathologie

VIOLLIER

Cancer Panels

Oncomine™ Comprehensive Assay v3 DNA, Thermo Fisher – 145 Gene

Hotspot-Mutationen

AKT1, AKT2, AKT3, ALK, AR, ARAF, AXL, BRAF, BTK, CBL, CCND1, CDK4, CDK6, CHEK2, CSF1R, CTNNB1, DDR2, EGFR, ERBB2 (=HER2), ERBB3, ERBB4, ERCC2, ESR1, EZH2, FGFR1, FGFR2, FGFR3, FGFR4, FLT3, FOXL2, GATA2, GNA11, GNAQ, GNAS, H3F3A, HNF1A, HRAS, IDH1, IDH2, JAK1, JAK2, JAK3, KDR, KIT, KNSTRN, KRAS, MAGOH, MAP2K1 (=MEK1), MAP2K2 (=MEK2), MAP2K4, MAPK1, MAX, MDM2, MDM4, MED12, MET, MTOR, MYC, MYCL, MYCN, MYD88, NFE2L2, NRAS, NTRK1, NTRK2, NTRK3, PDGFRA, PDGFRB, PIK3CA, PIK3CB, PPP2R1A, PTPN11, RAC1, RAF1, RET, RHEB, RHOA, ROS1, SF3B1, SMAD4, SMO, SPOP, SRC, STAT3, TERT, TOP1, U2AF1, XPO1

Komplettgensequenzierung

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

Kopienzahlveränderungen (CNVs)

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

Oncomine™ Comprehensive Assay RNA, Thermo Fisher – 51 Fusionspartner

Genfusionen

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

Oncomine™ Precision Assay DNA, Thermo Fisher – 46 Gene

Hotspot-Mutationen

AKT1, AKT2, AKT3, ALK, AR, ARAF, BRAF, CDK4, CDKN2A, CHEK2, CTNNB1, EGFR, ERBB2 (=HER2), ERBB3, ERBB4, ESR1, FGFR1, FGFR2, FGFR3, FGFR4, FLT3, GNA11, GNAQ, GNAS, HRAS, IDH1, IDH2, KIT, KRAS, MAP2K1 (=MEK1), MAP2K2 (= MEK2), MET, MTOR, NRAS, NTRK1, NTRK2, NTRK3, PDGFRA, PIK3CA, PTEN, RAF1, RET, ROS1, SMO, TP53

Kopienzahlveränderungen (CNVs)

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

Oncomine™ Focus Assay RNA, Thermo Fisher – 23 Fusionspartner

Genfusionen

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

NGS Kolorektalkarzinom

Hotspot-Mutationen

KRAS, NRAS, BRAF, PIK3CA

NGS Lungenkarzinom

Hotspot-Mutationen

EGFR, KRAS, BRAF, HER2, MET

Genfusionen

ALK1, ROS1, RET, NTRK1, NTRK2, NTRK3, MET Exon-14-Skipping

NGS Melanom

Hotspot-Mutationen

BRAF, KIT, NRAS, HRAS

NGS Gastrointestinaler Stromatumor (GIST)

Hotspot-Mutationen

KIT, PDGFRA

NGS Schilddrüsenkarzinom

Hotspot-Mutationen

AKT1, BRAF, CTNNB1, HRAS, KRAS, NRAS, PIK3CA, PTEN, RET, TERT, TP53

Genfusionen

RET, PPARG, NTRK1, NTRK2, NTRK3

NGS Endometriumkarzinom

Komplettgensequenzierung

POLE, TP53, MLH1, MSH2, MSH6, PMS2

NGS Urothelkarzinom

Hotspot-Mutationen und Fusionen

FGFR1, FGFR2, FGFR3, FGFR4

Komplettgensequenzierung

TP53

NGS Ovarialkarzinom
TruSight Oncology 500 HRD powered by Myriad, Illumina
Mutationen in BRCAness assoziierten Genen inkl. BRCA1, BRCA2, PALB2
Auswertung des Genomic Instability Score (GIS)

NGS Mammakarzinom grosses Panel
TruSight Oncology 500, Illumina
Mutationen in BRCAness assoziierten Genen inkl. BRCA1, BRCA2, PALB2
Inkl. PIK3CA, AKT1, PTEN, ESR1

NGS Mammakarzinom kleines Panel
Oncomine™ Comprehensive Assay v3 DNA, Thermo Fisher
PIK3CA, AKT1, PTEN, ESR1

Liquid Biopsy Mammakarzinom
Oncomine™ Precision Assay GX, Thermo Fisher
ESR1, PIK3CA, AKT1

NGS Prostatakarzinom
TruSight Oncology 500, Illumina
Mutationen in BRCAness assoziierten Genen inkl. BRCA1, BRCA2, ATM
Inkl. Mikrosatelliteninstabilitätanalyse und CDK12

Weitere Analysen:
BRCA1, BRCA2 Komplettgensequenzierung
Genomic Instability Score (GIS) TruSight Oncology 500 HRD powered by Myriad
Mikrosatelliten-Instabilität (MSI) Fragmentlängenanalyse
MLH1-Promotormethylierung Fragmentlängenanalyse
Tumormutationslast (TMB) TruSight Oncology 500, Illumina

Alle aufgeführten Analysen sind bei Viollier nach SN EN ISO 15189 akkreditiert.

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