



INVIEW ONCOPROFILING OVERVIEW

Protein coding genes | miRNAs | Extra-exonic variants



Eurofins' next-generation sequencing cancer panel covers the entire exons of 728 protein coding genes. SNPs and InDels can be detected with sensitivity down to 1%. Copy number variations and gene fusions are also specified in the report.

PROTEIN CODING GENES

ABCB1	ARID2	BIRC5	CD79A	CRLF2	DDR1	EPCAM	FAM175A	FGFR3
ABCC2	ARID5B	BLM	CD79B	CRTC1	DDR2	EPHA2	FAM35A	FGFR4
ABL1	ASXL1	BMP1	CDA	CSDE1	DDX11	EPHA3	FAM46C	FH
ABL2	ASXL2	BMPR1A	CDC27	CSF1	DDX3X	EPHA5	FAM58A	FLCN
ACVR1	ATM	BRAF	CDC42	CSF1R	DDX41	EPHA7	FANCA	FLI1
ACVR1B	ATP11B	BRCA1	CDC73	CSF2	DHX15	EPHB1	FANCB	FLT1
ACVR2A	ATP4A	BRCA2	CDH1	CSF3R	DICER1	EPHB4	FANCC	FLT3
ACVRL1	ATP6V0D2	BRD4	CDH4	CSMD3	DIS3	ERBB2	FANCD2	FLT4
ADARB2	ATR	BRIP1	CDK12	CSNK1A1	DIS3L2	ERBB3	FANCE	FN1
ADGRA2	ATRX	BTG1	CDK2	CSNK2A1	DMD	ERBB4	FANCF	FOXA1
ADORA2A	ATXN7	BTG2	CDK4	CTC1	DNAJB1	ERCC1	FANCG	FOXF1
AGO1	AURKA	BTK	CDK6	CTCF	DNMT1	ERCC2	FANCI	FOXL2
AGO2	AURKB	BUB1B	CDK7	CTLA4	DNMT3A	ERCC3	FANCL	FOXO1
AGTRAP	AXIN1	C11orf30	CDK8	CTNNA1	DNMT3B	ERCC4	FANCM	FOXP1
AIP	AXIN2	c2orf44	CDKN1A	CTNNB1	DOT1L	ERCC5	FAS	FRS2
AJUBA	AXL	CALR	CDKN1B	CTR9	DPYD	ERCC6	FAT1	FSTL5
AKAP9	B2M	CARD11	CDKN1C	CUBN	DROSHA	ERF	FAT3	FUBP1
AKT1	BABAM1	CARM1	CDKN2A	CUL3	DSE	ERG	FBXO11	FYN
AKT2	BAI3	CASP8	CDKN2B	CUL4A	DUSP4	ERRFI1	FBXO32	FZD1
AKT3	BAP1	CASR	CDKN2C	CUX1	E2F3	ESR1	FBXW7	FZD10
ALB	BARD1	CBFB	CEBPA	CXCR2	ECT2L	ESR2	FGF1	FZD2
ALK	BAX	CBL	CENPA	CXCR4	EED	ESRP1	FGF10	FZD3
ALOX12B	BAZ2B	CBLB	CEP57	CYLD	EEF1A1	ETAA1	FGF12	FZD4
AMER1	BBC3	CBLC	CHD1	CYP17A1	EGFL7	ETS1	FGF14	FZD5
AMPH	BCL10	CCDC178	CHD2	CYP19A1	EGFR	ETV1	FGF19	FZD6
ANKRD11	BCL2	CCDC6	CHD4	CYP2A6	EIF1AX	ETV4	FGF2	FZD7
ANKRD26	BCL2L1	CCNB3	CHD7	CYP2B6	EIF4A2	ETV5	FGF23	FZD9
APC	BCL2L11	CCND1	CHEK1	CYP2C19	EIF4E	ETV6	FGF3	G6PD
APEX1	BCL2L2	CCND2	CHEK2	CYP2C9	ELF3	EWSR1	FGF4	GAB1
APLNR	BCL6	CCND3	CHIC2	CYP2D6	ELMO1	EXO1	FGF5	GAB2
AR	BCL9	CCNE1	CIC	CYSLTR2	ELOC	EXOC2	FGF6	GABRA6
ARAF	BCOR	CD22	CIT	DAXX	EML4	EXT1	FGF7	GAS6
ARFRP1	BCORL1	CD274	CMTR2	DCC	EMSY	EXT2	FGF8	GATA1
ARHGAP35	BCR	CD276	CNTN4	DCUN1D1	EP300	EZH1	FGF9	GATA2
ARID1A	BIRC2	CD70	CREBBP	DDB2	EP400	EZH2	FGFR1	GATA3
ARID1B	BIRC3	CD74	CRKL	DDIT3	EPAS1	EZR	FGFR2	GATA4



PROTEIN CODING GENES

GATA6	HLA-B	JUN	MAP3K1	MYCN	PAK5	POLE	RAD52	SCG5
GEN1	HLA-C	KAT6A	MAP3K13	MYD88	PALB2	POLG	RAD54L	SCN11A
genes*	HNF1A	KBTBD4	MAP3K14	MYO18A	PARG	POT1	RAF1	SDC4
GID4	HNRNPK	KDM4B	MAP3K4	MYO1B	PARK2	PPARG	RANBP2	SDHA
GLI1	HOXB13	KDM5A	MAP4K3	MYOD1	PARP1	PPM1D	RARA	SDHAF2
GNA11	HRAS	KDM5C	MAP7	NAB2	PARP2	PPM1L	RARB	SDHB
GNA13	HSD3B1	KDM6A	MAPK1	NADK	PARP3	PPP2R1A	RARG	SDHC
GNAI2	HSP90AA1	KDR	MAPK3	NBN	PAX3	PPP2R2A	RASA1	SDHD
GNAQ	HSPH1	KEAP1	MAPKAP1	NCOA2	Pax3	PPP4R2	RB1	SEC16A
GNAS	HUWE1	KEL	MAS1L	NCOA3	PAX5	PPP6C	RBM10	SERPINB3
GNAT2	ICOSLG	KIAA1549	MAX	NCOR1	PAX7	PRDM1	RECQL	SERPINB4
GNB1	ID3	KIF5B	MCL1	NEGR1	PAX8	PRDM14	RECQL4	SESN1
GOPC	IDH1	KIT	MDC1	NEK2	PAXIP1	PREX2	RECQL5	SESN2
GPC3	IDH2	KLF4	MDM2	NELL2	PBRM1	PRF1	REL	SESN3
GPR78	IFITM1	KLF5	MDM4	NF1	PCBP1	PRKAR1A	REST	SETBP1
GPS2	IFITM3	KLF6	MED12	NF2	PCGF2	PRKCI	RET	SETD2
GREM1	IFNGR1	KLHL6	MED13	NFE2L2	PDCD1	PRKD1	REV3L	SETDB1
GRIN2A	IGF1	KMT2A	MEF2B	NFKBIA	PDCD1LG2	PRKDC	RFC1	SF1
GRM3	IGF1R	KMT2B	MEN1	NIPA2	PDGFRA	Protein-coding	RFWD2	SF3A1
GRM8	IGF2	KMT2C	MERTK	NKX2-1	PDGFRB	PRPF40B	RHBDF2	SF3B1
GSK3B	IGF2R	KMT2D	MET	NKX2-8	PDK1	PRSS8	RHEB	SGK1
GSTP1	IGSF10	KMT5A	MGA	NKX3-1	PDPK1	PSMB1	RHOA	SH2B3
GXYLT1	IKBKE	KNSTRN	MIER3	NOTCH1	PDZRN3	PSMB2	RICTOR	SH2D1A
H3F3A	IKZF1	KRAS	MITF	NOTCH2	PGBD5	PSMB5	RIF1	SHH
H3F3B	IKZF4	KREMEN1	MKNK1	NOTCH3	PGR	PSMD1	RIT1	SHOC2
H3F3C	IL10	LAMA2	MLC1	NOTCH4	PHF6	PSMD2	RNF43	SHQ1
HDAC1	IL2RA	LAMP1	MLH1	NPM1	PHOX2B	PTCH1	ROS1	SLC22A1
HDAC2	IL2RB	LATS1	MLH3	NRAS	PIGA	PTEN	RPA1	SLC22A2
HDAC6	IL2RG	LATS2	MLLT1	NRCAM	PIK3C2B	PTGFR	RPS6KA3	SLC31A1
HGF	IL6	LCK	MLLT3	NRG1	PIK3C2G	PTP4A1	RPS6KA4	SLC34A2
HIST1H1C	IL6ST	LMO1	MPL	NSD1	PIK3C3	PTPN11	RPS6KB1	SLC45A3
HIST1H2BD	IL7R	LPAR2	MRE11	NSD2	PIK3CA	PTPN12	RPS6KB2	SLC7A8
HIST1H3A	INHA	LRP1B	MRE11A	NSD3	PIK3CB	PTPRD	RPTOR	SLC9A9
HIST1H3B	INHBA	LRRK2	MSH2	NT5C2	PIK3CD	PTPRN2	RRAGC	SLCO1B1
HIST1H3C	INPP4A	LTK	MSH3	NTHL1	PIK3CG	PTPRO	RRAS	SLFN11
HIST1H3D	INPP4B	LYN	MSH6	NTRK1	PIK3R1	PTPRS	RRAS2	SLIT2
HIST1H3E	INPPL1	LZTR1	MSI1	NTRK2	PIK3R2	PTPRT	RSPO2	SLX4
HIST1H3F	INSR	MAD2L2	MSI2	NTRK3	PIK3R3	QKI	RTEL1	SMAD2
HIST1H3G	IRAK4	MAF	MST1	NUF2	PIM1	RAB35	RUNX1	SMAD3
HIST1H3H	IRF2	MAGI2	MST1R	NUP93	PLCG2	RAC1	RUNX1T1	SMAD4
HIST1H3I	IRF4	MAGI3	MTAP	NUTM1	PLK2	RAC2	RXRA	SMARCA2
HIST1H3J	IRS1	MAGOH	MTOR	OPCML	PMAIP1	RAD21	RXRB	SMARCA4
HIST2H3A	IRS2	MALT1	MUC16	OR5L1	PMS1	RAD50	RXRG	SMARCB1
HIST2H3C	ITCH	MAML1	MUTYH	OTOP1	PMS2	RAD51	RYBP	SMARCD1
HIST2H3D	JAK1	MAP2K1	MYB	P2RY8	PNP	RAD51B	S1PR2	SMARCE1
HIST3H3	JAK2	MAP2K2	MYC	PAK1	PNRC1	RAD51C	SAMD9L	SMC1A
HLA-A	JAK3	MAP2K4	MYCL	PAK3	POLD1	RAD51D	SBDS	SMC3



PROTEIN CODING GENES

SMO	SPTA1	SUFU	TEK	TLR7	TRAF2	UGT1A1	WT1	ZBTB2
SMYD3	SRC	SUZ12	TEN1	TLR8	TRAF3	UPF1	WWP1	ZBTB7A
SNCAIP	SRCAP	SYK	TERC	TLR9	TRAF5	USP16	WWTR1	ZFHX3
SNTG2	SRSF2	SYNE3	TERT	TMEM127	TRAF7	USP25	XIAP	ZIC3
SOCS1	SSTR1	TACC3	TET1	TMPRSS2	TRIO	USP8	XPA	ZMYM3
SOS1	STAG1	TAF1	TET2	TNFAIP3	TRIP13	VCL	XPC	ZNF2
SOX10	STAG2	TAP1	TFE3	TNFRSF14	TRRAP	VEGFA	XPO1	ZNF217
SOX17	STAT3	TAP2	TFG	TOP1	TSC1	VHL	XRCC1	ZNF226
SOX2	STAT4	TAS2R38	TFRC	TOP2A	TSC2	VTCN1	XRCC2	ZNF473
SOX9	STAT5A	TBX20	TGFBR1	TP53	TSHR	WAS	XRCC3	ZNF595
SPEG	STAT5B	TBX3	TGFBR2	TP53BP1	TYK2	WBSCR17	XRCC5	ZNF703
SPEN	STK11	TCERG1	THSD7B	TP63	TYRO3	WEE1	XRCC6	ZNRF3
SPOP	STK19	TCF19	TIAF1	TPM3	U2AF1	WISP3	YAP1	ZRSR2
SPRED1	STK40	TCF3	TIPARP	TPM4	U2AF2	WNK2	YES1	
SPRTN	STN1	TCF7L2	TLR4	TPMT	UBR3	WRN	ZBED4	

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miRNAs[◊]

hsa-miR-423	hsa-miR-200b	hsa-miR-106a	hsa-miR-151a	hsa-miR-20a	hsa-miR-376c
hsa-miR-605	hsa-miR-200c	hsa-miR-106b	hsa-miR-15b	hsa-miR-22	hsa-miR-378a
hsa-miR-618	hsa-miR-21	hsa-miR-107	hsa-miR-16	hsa-miR-221	hsa-miR-409
hsa-miR-149	hsa-miR-210	hsa-miR-10b	hsa-miR-181a	hsa-miR-222	hsa-miR-451a
hsa-miR-603	hsa-miR-30a	hsa-miR-122	hsa-miR-181b	hsa-miR-223	hsa-miR-483
hsa-miR-196a-2	hsa-miR-31	hsa-miR-125b	hsa-miR-182	hsa-miR-25	hsa-miR-486
hsa-let-7b	hsa-miR-34a	hsa-miR-126	hsa-miR-187	hsa-miR-26a	hsa-miR-574
hsa-let-7c	hsa-miR-34b	hsa-miR-127	hsa-miR-18a	hsa-miR-27a	hsa-miR-646
hsa-miR-137	hsa-miR-34c	hsa-miR-130a	hsa-miR-192	hsa-miR-29a	hsa-miR-652
hsa-miR-141	hsa-miR-429	hsa-miR-145	hsa-miR-195	hsa-miR-29b	hsa-miR-92a
hsa-miR-143	hsa-let-7d	hsa-miR-146a	hsa-miR-199a	hsa-miR-29c	hsa-miR-93
hsa-miR-155	hsa-let-7g	hsa-miR-148a	hsa-miR-19a	hsa-miR-320a	
hsa-miR-17	hsa-let-7i	hsa-miR-148b	hsa-miR-19b-1	hsa-miR-335	
hsa-miR-200a	hsa-miR-103a	hsa-miR-150	hsa-miR-205	hsa-miR-375	

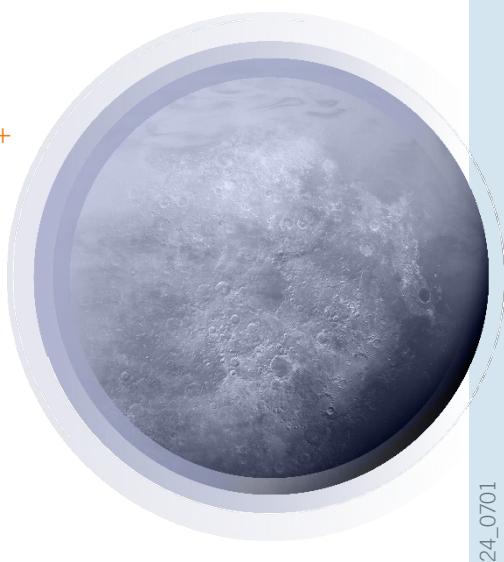
[◊] The most cancer relevant miRNAs are fully covered and all alterations within those genes can be detected.

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EXTRA-EXONIC VARIANTS

rs17401966	rs757978	rs4635969	rs9268542	rs1456315	rs11012732	rs1393350	rs4924410	rs11083846
rs9430161	rs17272796	rs4975616	rs6903608	rs16901979	rs10993994	rs1801516	rs4775302	rs2735839
rs1210110	rs4973768	rs401681	rs2395185	rs2456449	rs3123078	rs3802842	rs4775699	rs961253
rs7555566	rs1155741	rs31489	rs2858870	rs16902094	rs10821936	rs498872	rs8030672	rs910873
rs7538876	rs1052501	rs12653946	rs674313	rs445114	rs7089424	rs735665	rs7176508	rs4925386
rs7412746	rs2660753	rs2255280	rs28421666	rs13281615	rs10822013	rs2900333	rs8034191	rs6010620
rs3790844	rs9284813	rs13361707	rs2647012	rs1562430	rs10995190	rs718314	rs1051730	rs4809324
rs6691170	rs17181170	rs2121875	rs10484561	rs10505477	rs224278	rs10875943	rs8042374	rs372883
rs6687758	rs9841504	rs4415084	rs9275572	rs6983267	rs704010	rs11169552	rs1528601	rs2014300
rs801114	rs10934853	rs889312	rs210138	rs7014346	rs3765524	rs902774	rs3803662	rs45430
rs1364054	rs6763931	rs10052657	rs1321311	rs1447295	rs2274223	rs995030	rs4784227	rs1547374
rs3755132	rs161792	rs9293511	rs10484761	rs4242382	rs3781264	rs3782181	rs3112612	rs738722
rs807624	rs6774494	rs1027643	rs9352613	rs4242384	rs17119461	rs4474514	rs9929218	rs36600
rs1465618	rs10936599	rs20541	rs339331	rs7837688	rs12413624	rs11066015	rs391525	rs2283873
rs7579899	rs10936632	rs4624820	rs2180341	rs9642880	rs11199874	rs671	rs258322	rs242076
rs1432295	rs4488809	rs10058728	rs9485372	rs2019960	rs2981579	rs4767364	rs1805007	rs2284063
rs721048	rs10937405	rs872071	rs2046210	rs10088218	rs2981575	rs2074356	rs4785763	rs1014971
rs6734275	rs17505102	rs12210050	rs685449	rs891835	rs1219648	rs11066280	rs11655512	rs5759167
rs10187424	rs710521	rs4712653	rs651164	rs4295627	rs2981582	rs4765623	rs4795519	rs5768709
rs17483466	rs2131877	rs6939340	rs9364554	rs2294008	rs11017876	rs1572072	rs4430796	rs6603251
rs12621278	rs798766	rs4324798	rs7758229	rs7040024	rs3817198	rs9510787	rs7501939	rs5934683
rs2072590	rs11940551	rs29232	rs4487645	rs755383	rs7127900	rs753955	rs4793172	rs5955543
rs13016963	rs1494961	rs3129055	rs11978267	rs10974944	rs110419	rs9572094	rs7210100	rs1327301
rs13393577	rs12500426	rs2860580	rs4132601	rs3814113	rs1945213	rs9600079	rs1859962	rs5945572
rs3768716	rs17021918	rs2517713	rs7808249	rs7023329	rs11228565	rs9573163	rs17674580	rs5945619
rs6435862	rs1229984	rs6457327	rs6465657	rs2157719	rs7931342	rs9543325	rs7238033	rs5919432
rs13387042	rs971074	rs130067	rs1495741	rs1412829	rs10896449	rs7335046	rs4939827	
rs966423	rs7679673	rs2894207	rs1512268	rs1011970	rs7130881	rs944289	rs8170	
rs7584993	rs10069690	rs2596542	rs2439302	rs4977756	rs7105934	rs116909374	rs8102137	
rs13397985	rs2242652	rs2248462	rs1106334	rs965513	rs614367	rs4444235	rs10411210	
rs7584330	rs2736100	rs3117582	rs16892766	rs865686	rs3824999	rs4905366	rs8102476	
rs2292884	rs2853676	rs204999	rs1016343	rs10795668	rs790356	rs4779584	rs11083846	

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