

PANCANCER pro

For the screening of solid tumors.

PANCANCER pro

PANCANCER pro is a novel NGS medical device for the molecular profiling of the variants involved in onset and progression of solid tumors.

PANCANCER solution

PANCANCER pro is a kit for the analysis of 96 genes related to several solid tumors, through a molecular protocol based on NGS technologies. The kit is validated for germline analysis (SNPs, indels, CNVs) of DNA extracted from blood or body tissues samples.

PANCANCER pro kit contains all reagents required for the preparation of the capture of specifically designed probes and for the NGS analysis using Illumina.

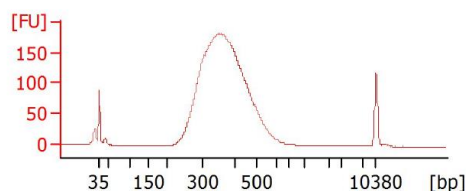
WORKFLOW

Library preparation follows a straightforward, capture-based protocol that can be completed in as little as 24 hours, with < 3 hours hands-on time. Resulting libraries can be normalized, pooled, and then loaded on to a flow cell for sequencing. Prepared libraries are sequenced on any compatible Illumina sequencers.

Validation

To demonstrate assay capabilities, clinical samples were run in a clinical setting. DNA quality and quantity of the libraries prepared were verified using Qubit and Agilent Bioanalyzer.

Figure 1: PANCANCER pro final library profile example



SAMPLE PER RUN

Instrument	Sample per run
MiSeq Kit v2 (300-cycles)	16
MiSeq Kit v2 (500-cycles)	16
MiSeq Kit v3 (600-cycles)	32
MiniSeq Mid Output Kit (300-cycles)	8
MiniSeq High Output Kit (300-cycles)	32
NextSeq 550 Mid-Output Kit	112
NextSeq 550High-Output Kit	352

**the maximum number of samples per cartridge/chip estimated assuming an average depth of 300x. The optimal number of samples must be empirically determined on local setups.*

Ordering Information

Product	REF
PANCANCERpro	C3200-16X (16 test)
PANCANCERpro	C3200-96X (96 test)
<i>For Illumina instruments</i>	
UDI Primers Set A (96 test)	7001
UDI Primers Set B (96 test)	7002
UDI Primers Set C (96 test)	7003
UDI Primers Set D (96 test)	7004
UDI Primers Set 16 (16 test)	7005

Table 1. List of target genes in PANCANCER pro

ABL1	CDKN2A	FGFR3	NRAS	TP53	P13K	CDH1	MLP
ALK	CHEK2	FLT3	PALB2	VHL	EGFR	CSF1R	NPM1
APC	CHEK1	HRAS	PIK3CA	BRCA1	PDL1 (CD274)	DDR2	PDGFRA
ARID1A	CSF3R	IDH1	PTEN	BRCA2	KRAS	ERBB2	PTPN11
ATM	CTNNB1	IDH2	RAD51B	HER2	NOTCH1	ERBB4	STK11
ATR	DNMT3A	JAK2	RAD51C	MET	NOTCH2	EZH2	SMAD4
ATRX	FANCA	JAK3	RAD51D	NTRK1	NOTCH3	FOXL2	SMARCB1
BARD1	FANCL	KIT	RAD54L	NTRK2	NOTCH4	GNA11	SMO
BRAF	FBXW7	KMT2A	RB1	NTRK3	AKT1	GNAQ	SRC
BRIP1	EML4	MAP2K1	RET	HRAS	PIK3CA	GNAS	TSC1
CBL	FGFR1	MLH1	ROS1	KRAS	TSHR	HNF1A	VHL
CDK12	FGFR2	MSH6	TET2	NRAS	TERT	KDR	