

XCeloSeq® Pan Cancer cfDNA Kit

SEQ002

Product Description

The XCeloSeq Pan Cancer cfDNA Kit contains two pools of targeted DNA enrichment primers for independent identification of mutations from sense and antisense DNA strands. These primers are designed for use only with XCeloSeq Targeted cfDNA Core Reagents (Part Code: GF020). Together they allow for the generation of high quality, high-complexity next-generation sequencing libraries that are suitable for use with Illumina® next-generation sequencing instruments.

Kit Contents

Component	Tube Colour	Cap Colour	Storage	Part Code
Pan Cancer cfDNA Kit Pool 1 – OUTER	Transparent	Orange	-20°C	PC0008
Pan Cancer cfDNA Kit Pool 1 – INNER	Transparent	Black	-20°C	PC0009
Pan Cancer cfDNA Kit Pool 2 – OUTER	Transparent	White	-20°C	PC0010
Pan Cancer cfDNA Kit Pool 2 – INNER	Transparent	Yellow	-20°C	PC0011

Kit Specifications and Recommendations

Gene Targets	100
Targeting Primers [%]	1147
Recommended Input Quantity [*]	5-50 ng cfDNA
Recommended Read Number [#]	17,000,000 (Dual index, 150 bp paired-end)
Hands on Time	1.5 Hours
Total Protocol Time	5.75 hours

[%]Targeting primers are split between the sense and antisense DNA strands

^{*}Higher quantities within this range will improve maximum sensitivity, recommended maximum is 50 ng. The product supports capture with down to 1.0 ng of cfDNA, however this is not recommended as it will lead to reduced sensitivity. Enzymatically fragmented FFPE is also supported as an alternative starting material, when 50 ng should be used.

[#]Suggested read number for cfDNA samples. Reads should be divided equally between Pool 1 and Pool 2 Libraries. Read numbers can be optimised by users for different uses. For example, for FFPE libraries fewer reads may be sufficient.

Assay Targets

Selected target regions are enriched for the following genes. Target region bed files are available upon request.

ABL1	BRCA1	CHEK2	ESR1	GNAQ	KEAP1	MSH2	NTRK3	RHOA	SMO
AKT1	BRCA2	CSF1R	EZH2	GNAS	KIT	MSH6	PDGFRA	RIT1	SRC
ALK	CASP8	CTNNB1	FBXW7	HNF1A	KLF5	MTOR	PIK3CA	RNF43	STK11
AMER1	CCND1	DDR2	FGFR1	HRAS	KRAS	MYC	PTCH1	ROS1	TCF7L2
APC	CCND2	DMD	FGFR2	IDH1	MAP2K1	NF1	PTEN	SETD2	TP53*
AR	CCND3	EGFR	FGFR3	IDH2	MAP2K2	NFE2L2	PTPN11	SF3B1	TSC1
ARAF	CDH1	EP300	FGFR4	JAK2	MET	NOTCH1	RAF1	SMAD2	TSC2
ARID1A	CDK4	ERBB2	FLT3	JAK3	MGA	NPM1	RB1	SMAD4	UA2F1
ATM	CDK6	ERBB3	GATA3	KDM6A	MLH1	NRAS	RBM10	SMARCA4	VHL
BRAF	CDKN2A	ERBB4	GNA11	KDR	MPL	NTRK1	RET	SMARCB1	ZFP36L2

***Whole Coding Region Coverage**

Additional Information

Please refer to “XCeloSeq Targeted cfDNA Enrichment Protocol with UDIs” for instructions for use.

Limitations of Use

For Research Use Only (RUO)

This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals. SDS sheets relevant to this product are available upon request.

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