

XCeloSeq® Myeloid Fusion Kit

SEQ017

Product Description

The XCeloSeq Myeloid Fusion Kit contains a pool of targeted RNA enrichment primers located in conserved fusion partners for identification of both known and unknown fusions from RNA. These primers are designed for use only with XCeloSeq Targeted RNA Core Reagents (GF031). 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
Myeloid Fusion Kit – Outer Pool	Transparent	Orange	-20°C	PC0453
Myeloid Fusion Kit – Inner Pool	Transparent	Black	-20°C	PC0454

Specifications

Gene Targets	39
Targeting Primers%	310
Recommended Input Quantity*	5-200 ng total FFPE-RNA
	5-100 ng high quality RNA
Recommended Reads Per Sample	2,750,000
Hands on Time	2.0 Hours
Total Protocol Time	7.25 hours

%An additional 8 QC primers are included

*Higher quantities within this range will improve maximum sensitivity. The product supports capture with down to 1.0 ng of RNA, however this is not recommended as it will lead to reduced sensitivity. Cell-free RNA and total cell-free nucleic acids may be used as alternative starting materials, however fusion detection sensitivity will be lower due to cell-free RNA concentrations typically being very low, when using this material maximising starting input quantity will help ensure the best possible results.

Assay Targets

Gene	Accession	Exon(s)	Fusion Direction
ABL1	NM_005157.4	1, 2, 3, 4, 5	5'
BCR	NM_004327.4	1, 2, 3, 8, 12, 13, 14, 15, 16	3'
CBFB	NM_022845.3	4, 5	3'
CHD1	NM_001270.2	1, 2	5'
CHIC2	NM_012110.4	1, 2, 3	3'
CREBBP	NM_004380.3	2, 3, 4, 5, 6	5'
CSF1R	NM_005211.3	9, 10, 11, 12, 13, 14	5'
ERG	NM_004449.4	7, 8, 9, 10, 11	5'
ETV6	NM_001987.5	1, 2, 3, 4, 5, 6	3'
		2, 3, 4, 5, 6, 7	5'
FGFR1	NM_015850.4	12, 17	3'
		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17	5'
GLIS2	NM_032575.2	2, 3	5'
IKZF1	NM_006060.6	1, 2, 3	3'
		7, 8	5'
IKZF3	NM_012481.5	2, 3, 4, 5, 6, 7	3'
JAK2	NM_004972.3	9, 10, 11, 12	3'
		6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	5'
KAT6A	NM_006766.5	13, 14, 15, 16	3'
KMT2A	NM_005933.4	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35	3'
		2, 3	5'
MECOM	NM_004991.4	1, 2, 3, 4	5'
MLLT10	NM_004641.3	7, 8, 9, 10	3'
		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18	5'
MLLT4	NM_001040000.3	2	5'
MRTFA	NM_020831.6	4, 5, 6	5'
MYC	NM_002467.6	1, 2	5'
MYH11	NM_002474.3	7, 8, 9, 10, 11, 14, 15, 16	5'
NF1	NM_000267.3	14	3'
		36	5'

Gene	Accession	Exon(s)	Fusion Direction
NOTCH1	NM_017617.5	24	3'
		24, 25, 26, 27, 28, 29	5'
		34 (exon skipping)	-
NUP214	NM_005085.4	17, 18, 19	5'
NUP98	NM_016320.5	8, 9, 10, 11, 12, 13, 14, 15, 16, 17	3'
		12, 13	5'
PDCD1LG2	NM_025239.4	5, 6	3'
		1, 2, 3	5'
PDGFRA	NM_006206.6	9, 10, 11, 12, 13, 14	5'
PDGFRB	NM_002609.4	8, 9, 10, 11, 12, 13, 14	5'
PICALM	NM_007166.4	16, 17, 18, 19	3'
PML	NM_002675.3	2, 3, 4, 5, 6, 7	3'
		2	5'
RARA	NM_000964.4	2, 3, 4, 5	5'
RBM15	NM_022768.4	1	3'
ROS1	NM_002944.2	31, 32, 33, 34, 35, 36	5'
RUNX1	NM_001754.4	2, 3, 4, 5, 6, 7, 8	3'
		5, 6, 7, 8, 9	5'
RUNX1T1	NM_001198679.1	2, 3	5'
SETD2	NM_014159.6	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	3'
TCF3	NM_003200.5	11, 12, 13, 14, 15, 16, 17, 18	3'
TFG	NM_006070.6	2, 3, 4	3'

Additional Information

Please refer to “XCeloSeq Targeted RNA Enrichment Protocol” 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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