

## 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
<b>ABL1</b>	NM_005157.4	1, 2, 3, 4, 5	5'
<b>BCR</b>	NM_004327	1, 2, 3, 8, 12, 13, 14, 15, 16	3'
<b>CBFB</b>	NM_022845	4, 5	3'
<b>CHD1</b>	NM_001270	1, 2	5'
<b>CHIC2</b>	NM_012110	1, 2, 3	3'
<b>CREBBP</b>	NM_004380	2, 3, 4, 5, 6	5'
<b>CSF1R</b>	NM_005211	9, 10, 11, 12, 13, 14	5'
<b>ERG</b>	NM_004449	7, 8, 9, 10, 11	5'
<b>ETV6</b>	NM_001987	1, 2, 3, 4, 5, 6	3'
		2, 3, 4, 5, 6, 7	5'
<b>FGFR1</b>	NM_023110	12, 17	3'
		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17	5'
<b>GLIS2</b>	NM_032575	2, 3	5'
<b>IKZF1</b>	NM_006060	1, 2, 3	3'
		7, 8	5'
<b>IKZF3</b>	NM_012481	2, 3, 4, 5, 6, 7	3'
<b>JAK2</b>	NM_004972	9, 10, 11, 12	3'
		6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	5'
<b>KAT6A</b>	NM_006766	13, 14, 15, 16	3'
<b>KMT2A</b>	NM_005933	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'
<b>MECOM</b>	NM_004991	1, 2, 3, 4	5'
<b>MLLT10</b>	NM_004641	7, 8, 9, 10	3'
		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18	5'
<b>MLLT4</b>	NM_001040000	2	5'
<b>MRTFA</b>	NM_020831	4, 5, 6	5'
<b>MYC</b>	NM_002467	1, 2	5'
<b>MYH11</b>	NM_002474	7, 8, 9, 10, 11, 14, 15, 16	5'
<b>NF1</b>	NM_000267	14	3'
		36	5'

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