

## Product datasheet for **KN202532**

### Mesothelin (MSLN) Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Mesothelin
Locus ID:	10232
Components:	<p><b>KN202532G1</b>, Mesothelin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCCAACAGGGGTCGAGCCGT</p> <p><b>KN202532G2</b>, Mesothelin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGCCTCGGTGCGTACTTGA</p> <p><b>KN202532D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

#### Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTTCGATG
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
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GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCT GTAAAGCGGAT GCCGGGAGCA
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GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
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 TTTTGCCAAG TTCTAATTCC ATCAGAAGCT GGTCGAGATC CGGAACCCTT AATATAACTT CGTATAATGT  
 ATGCTATACG AAGTTATTAG GTCCTCGAA GAGGTTCACT AGGCGCGCCG **AGGTGGGGAC** **GGCCAGGGG**  
**CCTGGGGGGC** **CAGGCCCA** **GCAAGGCTTT** **GCCTGCCCT** **GCCTTCTCC** **TGGAGTGCT** **GTGGTGCCA**  
**CGTCTCAGCA** **GCACTCTCTG** **CCCCAGAGG** **TGACTGGAGC** **TGGAGATCCA** **GCCAGGAGT** **GATGGGGCTC**  
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**TGGAAGGCCG** **GGCTCCCTGG** **TGGAGTCCG** **ACCCCTGTGC** **CTGGGGGACT** **GTGATGTCAC** **GGGGTACATG**  
**GGCCTGAGCC** **ACTGGCTTCT** **CTTTGGGGTG** **TGCACAGGGC** **TGGTGTGGG** **GGCGGCCAGG** **CTCTGCCTCC**  
**TTCTCCCCT** **GGGTCAGGGC** **ACAGCCAGA** **GGCCGCCCC** **CTCCCCAAG** **CTGTCCCTC** **TGCCCTTTA**

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GGATGGGTGC AGCCCTCGAG GACCCTGGCT GGAGAGACAG GGCAGGTAAG GTCCCTCTG GGGAAACAGG
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AGTTTCCACG GTCCTTGCTA GCAAGAGACG ACTGACTGAC TGACTGGAAA GAGGAAGGGC TGGAAGAGGA
AGGAGCTTGG CGTAATCATG GTCATAGCTG TTTCTGTGT GAAATTGTTA TCCGCTCACA ATTCCACACA
ACATACGAGC CGGAAGCATA AAGTGTAAG CCTGGGGTGC CTAATGAGTG AGCTAACTCA CATTAAATTGC
GTTGCGCTCA CTGCCCGCTT TCCAGTCGGG AAACCTGTGC TGCCAGCTGC ATTAATGAAT CGGCCAACGC
GCGGGGAGAG GCGGTTTGGC TATTGGGCGC TCTTCCGCTT CCTCGCTCAC TGACTCGTG CGCTCGGTGC
TTCGGCTCGC GCGAGCGGTA TCAGCTCACT CAAAGGCGGT AATACGGTTA TCCACAGAAT CAGGGGATAA
CGCAGGAAAG AACATGTGAG CAAAAGGCCA GCAAAAGGCC AGGAACCGTA AAAAGGCCGC GTTGCTGGCG
TTTTTCCATA GGCTCCGCC CCCTGACGAG CATCACAAAA ATCGACGCTC AAGTCAGAGG TGCGGAAACC
CGACAGGACT ATAAAGATAC CAGGCGTTTC CCCCTGGAAG CTCCCTCGTG CGCTCTCTG TTCCGACCCT
GCCGTTACC GGATACCTGT CCGCCTTCT CCCTTCGGGA AGCGTGGCGC TTTCTCATAG CTCACGCTGT
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ACCGCTGCGC CTTATCCGGT AACTATCGTC TTGAGTCAA CCCGGTAAGA CAGACTTAT CGCCACTGGC
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CCTAACTACG GCTACACTAG AAGAACAGTA TTTGGTATCT GCGCTCTGCT GAAGCCAGT ACCTTCGGAA
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GCAGATTACG CGCAGAAAA AAGGATCTCA AGAAGATCCT TTGATCTTTT CTACGGGGTC TGACGCTCAG
TGGAACGAAA ACTCACGTTA AGGGATTTTG GTCATGAGAT TATCAAAAAG GATCTTACC TAGATCCTTT
TAAATTAATA ATGAAGTTTT AAATCAATCT AAAGTATATA TGAGTAACT TGGTCTGACA GTTACCAATG
CTTAATCAGT GAGGCACCTA TCTCAGGAT CTGTCTATTT CGTTCATCCA TAGTTGCCTG ACTCCCGTC
GTGTAGATAA CTACGATACG GGAGGGCTTA CCATCTGGCC CCAGTGCTGC AATGATACCG CGAGAACCAC
GCTCACCGGC TCCAGATTA TCAGCAATA ACCAGCCAGC CGGAAGGGCC GAGCGCAGAA GTGGTCTGTC
AACTTTATCC GCCTCCATCC AGTCTATTA TTGTTGCCGG GAAGCTAGAG TAAGTAGTTC GCCAGTTAAT
AGTTTGCGCA ACGTTGTTGC CATTGCTACA GGCATCGTGG TGTCACGCTC GTCGTTTGGT ATGGCTTCAT
TCAGCTCCGG TTCCAACGA TC

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**GE100003**, scramble sequence in pCas-Guide vector

**Disclaimer:**

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

**RefSeq:**

[NM\\_001177355](#), [NM\\_005823](#), [NM\\_013404](#)

**UniProt ID:**

[Q13421](#)

**Synonyms:**

MPF; SMRP

**Summary:**

This gene encodes a preproprotein that is proteolytically processed to generate two protein products, megakaryocyte potentiating factor and mesothelin. Megakaryocyte potentiating factor functions as a cytokine that can stimulate colony formation of bone marrow megakaryocytes. Mesothelin is a glycosylphosphatidylinositol-anchored cell-surface protein that may function as a cell adhesion protein. This protein is overexpressed in epithelial mesotheliomas, ovarian cancers and in specific squamous cell carcinomas. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Feb 2016]

Product images:

