

## Product datasheet for **KN212206**

### MUC4 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:	MUC4
Locus ID:	4585
Components:	<p><b>KN212206G1</b>, MUC4 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TACCTGGGACCACATGCGGA</p> <p><b>KN212206G2</b>, MUC4 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCTGGCTGCGGGGAGCACTT</p> <p><b>KN212206D</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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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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CACTCAAAGG CGGTAATACG GTTATCCACA GAATCAGGGG ATAACGCAGG AAAGAACATG TGAGCAAAAAG
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TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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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\\_001322468](#), [NM\\_004532](#), [NM\\_018406](#), [NM\\_138297](#), [NM\\_138298](#), [NM\\_138299](#)

**UniProt ID:**

[Q99102](#)

**Synonyms:**

ASGP; HSA276359; MUC-4

**Summary:**

The major constituents of mucus, the viscous secretion that covers epithelial surfaces such as those in the trachea, colon, and cervix, are highly glycosylated proteins called mucins. These glycoproteins play important roles in the protection of the epithelial cells and have been implicated in epithelial renewal and differentiation. This gene encodes an integral membrane glycoprotein found on the cell surface, although secreted isoforms may exist. At least two dozen transcript variants of this gene have been found, although for many of them the full-length transcript has not been determined or they are found only in tumor tissues. This gene contains a region in the coding sequence which has a variable number (>100) of 48 nt tandem repeats. [provided by RefSeq, Jul 2008]

