

Product datasheet for KN209465RB

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Endostatin (COL18A1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: RFP-BSD

Symbol: Endostatin

Locus ID: 80781

Components: KN209465G1, Endostatin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN209465G2, Endostatin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN209465RBD**, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

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: <u>NM 030582, NM 130444, NM 130445</u>

UniProt ID: <u>P39060</u>

Synonyms: KNO; KNO1; KS

Summary: This gene encodes the alpha chain of type XVIII collagen. This collagen is one of the

multiplexins, extracellular matrix proteins that contain multiple triple-helix domains (collagenous domains) interrupted by non-collagenous domains. A long isoform of the protein has an N-terminal domain that is homologous to the extracellular part of frizzled receptors. Proteolytic processing at several endogenous cleavage sites in the C-terminal domain results in production of endostatin, a potent antiangiogenic protein that is able to inhibit angiogenesis and tumor growth. Mutations in this gene are associated with Knobloch syndrome. The main features of this syndrome involve retinal abnormalities, so type XVIII collagen may play an important role in retinal structure and in neural tube closure.

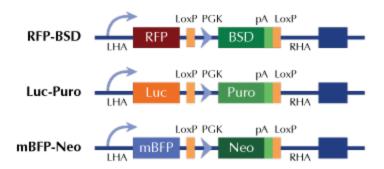
Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]





Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter