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Product datasheet for KN217324

S6K1 (RPS6KB1) 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: S6K1

Locus ID: 6198

Components: **KN217324G1**, S6K1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTGTCTCGGAAGTCCGGGGC
KN217324G2, S6K1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGCCCCGGACTTCCGAGACA
KN217324D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.
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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TACAGGCATC GTGGTGTCAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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.

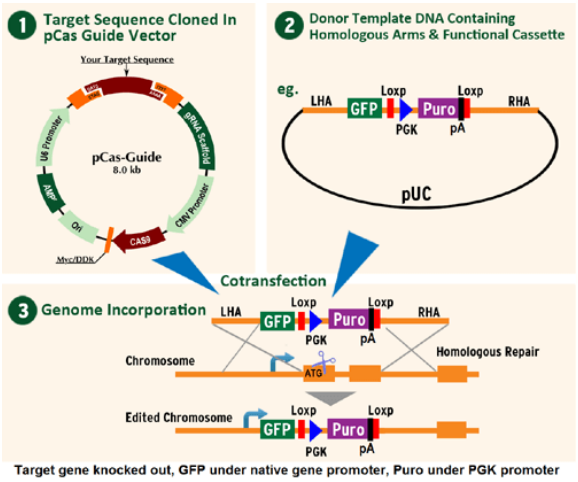
RefSeq: NM_001272042, NM_001272043, NM_001272044, NM_001272060, NM_003161, NR_161462, NM_001369670, NM_001369673, NM_001369675, NM_001369677, NM_001369678, NR_161455, NR_161456, NR_161460, NM_001369669, NM_001369671, NM_001369672, NM_001369674, NM_001369676, NM_001369679, NR_161457, NR_161458, NR_161459, NR_161461

UniProt ID: P23443

Synonyms: p70 S6KA; p70(S6K)-alpha; p70-alpha; p70-S6K; PS6K; S6K; S6K-beta-1; S6K1; STK14A

Summary: This gene encodes a member of the ribosomal S6 kinase family of serine/threonine kinases. The encoded protein responds to mTOR (mammalian target of rapamycin) signaling to promote protein synthesis, cell growth, and cell proliferation. Activity of this gene has been associated with human cancer. Alternatively spliced transcript variants have been observed. The use of alternative translation start sites results in isoforms with longer or shorter N-termini which may differ in their subcellular localizations. There are two pseudogenes for this gene on chromosome 17. [provided by RefSeq, Jan 2013]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter