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Product datasheet for KN204381

PTOP (ACD) 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: PTOP

Locus ID: 65057

Components: **KN204381G1**, PTOP gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGGCCCGTTTACTCTCATCG
KN204381G2, PTOP gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCGCGGCGTCACTCTGACAG
KN204381D, 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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TGGGGGATCA TGTAACTCGC CTT

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.

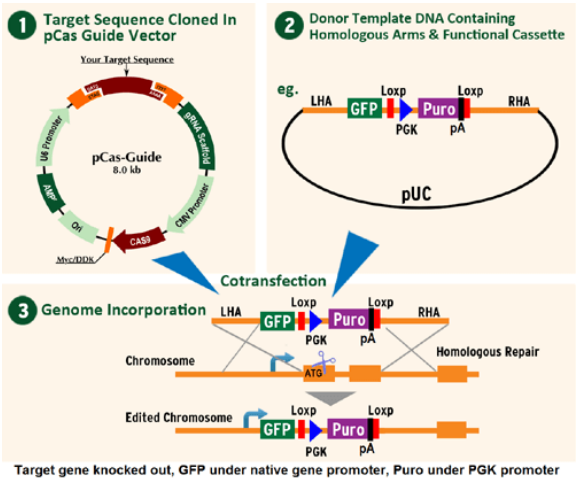
RefSeq: NM_001082486, NM_001082487, NM_022914

UniProt ID: Q96AP0

Synonyms: PIP1; PTOP; TINT1; TPP1

Summary: This gene encodes a protein that is involved in telomere function. This protein is one of six core proteins in the telosome/shelterin telomeric complex, which functions to maintain telomere length and to protect telomere ends. Through its interaction with other components, this protein plays a key role in the assembly and stabilization of this complex, and it mediates the access of telomerase to the telomere. Multiple transcript variants encoding different isoforms have been found for this gene. This gene, which is also referred to as TPP1, is distinct from the unrelated TPP1 gene on chromosome 11, which encodes tripeptidyl-peptidase I. [provided by RefSeq, Jul 2008]

Product images:



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