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Product datasheet for KN200226

Transglutaminase 2 (TGM2) 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: Transglutaminase 2

Locus ID: 7052

Components: **KN200226G1**, Transglutaminase 2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGACTCTGATACTCACCCT
KN200226G2, Transglutaminase 2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTAGGGATTCAGCTCCCACC
KN200226D, 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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AACCGCTTTT TTGCACAACA 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.

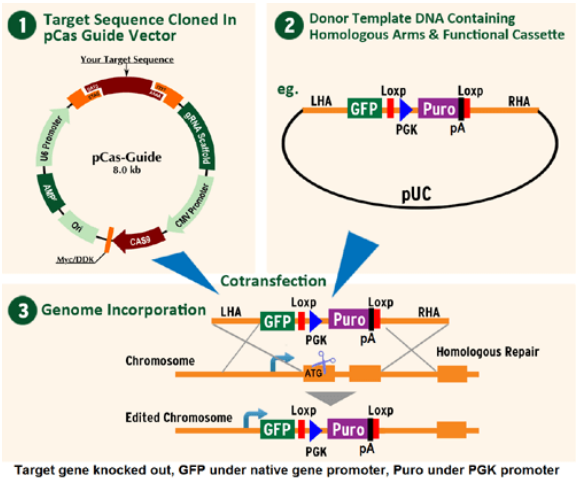
RefSeq: NM_004613, NM_198951, NM_001323316, NM_001323317, NM_001323318

UniProt ID: P21980

Synonyms: G-ALPHA-h; GNAH; HEL-S-45; TG2; TGC

Summary: Transglutaminases are enzymes that catalyze the crosslinking of proteins by epsilon-gamma glutamyl lysine isopeptide bonds. While the primary structure of transglutaminases is not conserved, they all have the same amino acid sequence at their active sites and their activity is calcium-dependent. The protein encoded by this gene acts as a monomer, is induced by retinoic acid, and appears to be involved in apoptosis. Finally, the encoded protein is the autoantigen implicated in celiac disease. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



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