

Product datasheet for **KN214474**

COL27A1 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:	COL27A1
Locus ID:	85301
Components:	KN214474G1 , COL27A1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTCCTGCTGCTCCAATCTCG KN214474G2 , COL27A1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGGGGGTGAGTACGAACTCG KN214474D , 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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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTG TGAGAATAGT GTATGCCGGC
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 TGAACGAAA ACTCACGTTA AGGGATTTTG GTCATGAGAT TATCAAAAAG GATCTTCACC TAGATCCTTT
 TAAATAAAA ATGAAGTTT AAATCAATCT AAAGTATATA TGAGTAACT TGGTCTGACA GTTACCAATG
 CTTAATCAGT GAGGCACCTA TCTCAGCGAT CTGTCTATT CGTTCATCCA TAGTTGCCTG ACTCCCCGTC
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 AGTTTGCGCA ACGTTGTTGC CATTGCTACA GGCATCGTGG TGTACGCTC GTCGTTTGGT ATGGCTTCAT
 TCAGCTCCGG TTCCAACGA TC

GE100003, scramble sequence in pCas-Guide vector

RefSeq:

NM_032161, NM_032888

UniProt ID:

Q8IZC6

Synonyms:

STLS

Summary:

This gene encodes a member of the fibrillar collagen family, and plays a role during the calcification of cartilage and the transition of cartilage to bone. The encoded protein product is a preproprotein. It includes an N-terminal signal peptide, which is followed by an N-terminal propetide, mature peptide and a C-terminal propeptide. The N-terminal propeptide contains thrombospondin N-terminal-like and laminin G-like domains. The mature peptide is a major triple-helical region. The C-terminal propeptide, also known as COLFI domain, plays crucial roles in tissue growth and repair. Mutations in this gene cause Steel syndrome. Alternatively spliced transcript variants have been found, but the full-length nature of some variants has not been determined. [provided by RefSeq, Sep 2014]

Product images:

