

Product datasheet for KN218041LP

OriGene Technologies, Inc.

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Collagen II (COL2A1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

Donor DNA: Luciferase-Puro

Symbol: Collagen II

Locus ID: 1280

Components: KN218041G1, Collagen II gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN218041G2, Collagen II gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN218041LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

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 001844</u>, <u>NM 033150</u>

UniProt ID: P02458

Synonyms: ANFH; AOM; COL11A3; SEDC; STL1

Summary: This gene encodes the alpha-1 chain of type II collagen, a fibrillar collagen found in cartilage

and the vitreous humor of the eye. Mutations in this gene are associated with

achondrogenesis, chondrodysplasia, early onset familial osteoarthritis, SED congenita, Langer-Saldino achondrogenesis, Kniest dysplasia, Stickler syndrome type I, and spondyloepimetaphyseal dysplasia Strudwick type. In addition, defects in processing chondrocalcin, a calcium binding protein that is the C-propeptide of this collagen molecule, are also associated with chondrodysplasia. There are two transcripts identified for this gene.

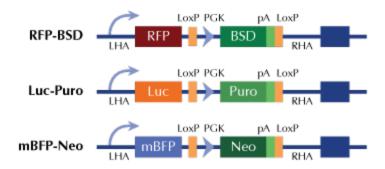
[provided by RefSeg, Jul 2008]





Product images:

Donor Vector Edited Chromosome



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