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COL1A2 Knockout 293T Cell Lysate, Homozygous

Catalog No.: RM50018

Basic Information

Catalog No.
RM50018

Category
Cell Lysate

Parental Cell line
293T

Genotype
Knockout

Background

This gene encodes the pro-alpha2 chain of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 chain. Type I is a fibril-forming collagen found in most connective tissues and is abundant in bone, cornea, dermis and tendon. Mutations in this gene are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIB, recessive Ehlers-Danlos syndrome Classical type, idiopathic osteoporosis, and atypical Marfan syndrome. Symptoms associated with mutations in this gene, however, tend to be less severe than mutations in the gene for the alpha1 chain of type I collagen (COL1A1) reflecting the different role of alpha2 chains in matrix integrity. Three transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene.

Gene Information

Gene Symbol
COL1A2

Species
Human

Gene ID
1278

Swiss Prot
P08123

Synonyms
OI4; EDSCV; EDSARTH2; Collagen I/COL1A2

Product Information

Description
COL1A2 Knockout cell line is engineered from 293T cell line with Gene-Editing Technology.
Allele-1:exon1 was deleted
Allele-2:exon1 was deleted
Mammalian cells such as human, rat and mouse cells are normally diploid with two alleles. Homozygote: both alleles were knocked out, mRNA has no signal, no expression of proteins. Heterozygote: only one allele was knocked out, the mRNA transcript levels was decreased compared to wild type, and the protein expression levels was also lower than that of the wild type.

Packaging
1 vial parental cell Lysate and 1 vial knockout cell Lysate

Shipping Conditions
4℃

Amount
50μL, 2μg/μL.

Storage
Lysate is stable for 12 months when stored at -20℃. Minimizing freeze-thaw cycles.

Protocol
To be used as WB control. Lysate is supplied in 1× SDS sample buffer (2% SDS, 60 mM Tris-HCl pH 6.8, 10% Glycerol, 0.02% Bromophenol blue, 60 mM beta-mercaptoethanol). Lysate should be boiled for 3 - 5 minutes before loading onto gel.

Contact

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Sequencing data

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WT    GGGGCTCTGCGAC**********TAAGTGCCTTCAGC
Mut   GGGGCTCTGCGAC***Deletion***TAAGTGCCTTCAGC
Allele-1:    exon1 was deleted

WT    GGGGCTCTGCGAC**********TAAGTGCCTTCAGC
Mut   GGGGCTCTGCGAC***Deletion***TAAGTGCCTTCAGC
Allele-2:    exon1 was deleted
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Genome sequence analysis of PCR products from parental (WT) and COL1A2 knockout (KO) 293T cells, using sanger sequencing.