

Active Recombinant Mouse Col18a1, His-tagged

Cat. No. Col18a1-205M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Col18a1 (His1591-Lys1774) fused with 6His tag at Cterminal, was expressed in Mouse NSO Cells.
Species	Mouse
Source	Mammalian Cells
ProteinLength	1591-1774 a.a.
Description	Collagen alpha-1(XVIII) chain is a protein that in humans is encoded by the COL18A1 gene. This gene encodes the alpha chain of type XVIII collagen. This collagen is one of the multiplexins, extracellular matrix proteins that contain multiple triple-helix domains (collagenous domains) interrupted by non-collagenous domains. The proteolytically produced C-terminal fragment of type XVIII collagen is endostatin, a potent antiangiogenic protein. Mutations in this gene are associated with Knobloch syndrome. The main features of this syndrome involve retinal abnormalities so type XVIII collagen may play an important role in retinal structure and in neural tube closure. Two transcript variants encoding different isoforms have been found for this gene.
Predicted N Terminal	Met-His1591
Formulation	Lyophilized from a 0.2 µ filtered solution in PBS.
Bio-activity	Measured by its ability to inhibit the FGF basic-dependent proliferation of HUVEC

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human umbilical vein endothelial cells. The ED50 for this effect is typically 0.3-1.5 g/mL in the presence of 20 g/mL of Goat Anti-Mouse Endostatin Antigen Affinity-purified Polyclonal Antibody.

Molecular Mass 21.3 kDa

Purity >95%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Storage Avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Reconstitution Reconstitute at 200 g/mL in PBS.

GENE INFORMATION

Gene Name Col18a1 collagen, type XVIII, alpha 1 [Mus musculus (house mouse)]

Official Symbol Col18a1

Synonyms Col18a1; collagen, type XVIII, alpha 1; collagen alpha-1(XVIII) chain; endostatin; procollagen, type XVIII, alpha 1

Gene ID [12822](#)

mRNA Refseq [NM_009929](#)

Protein Refseq [NP_034059](#)

UniProt ID P39061

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Chromosome Location	10 B5-C1; 10 39.72 cM
Pathway	Activation of Matrix Metalloproteinases; Assembly of collagen fibrils and other multimeric structures; Collagen formation
Function	identical protein binding; metal ion binding; structural molecule activity

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