For Research Use Only

Recombinant Human COL18A1 protein (His Tag)



Catalog Number: Eg0254

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: C-His

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human COL18A1 protein His1572-Lys1754 (Accession# P39060-3) with a His tag at the Cterminus.

GeneID:

80781

Accession: P39060-3

Predicted Molecular Mass:

23.9 kDa

SDS-PAGE:

25-28 kDa, reducing (R) condition

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Endostatin, a 20-kDa C-terminal fragment derived from collagen alpha-1(XVIII) chain (COL18A1), is an endogenously produced inhibitor of angiogenesis. Many different proteases are able to cleave the NC1 domain of collagen alpha-1(XVIII) chain to produce endostatin including cathepsins L, B, and K, elastase. Endostatin inhibits proliferation and migration of endothelial cells, angiogenesis, and tumor growth. It may interfere with the pro-angiogenic action of growth factors such as basic fibroblast growth factor (bFGF/FGF-2) and vascular endothelial growth factor (VEGF).

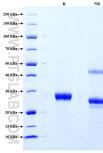
References

- 1. M S O'Reilly, et al. (1997) Cell. 88(2):277-85 2. M Ferreras, et al. (2000) FEBS Lett. 486(3):247-51. 3. Judah Folkman. (2006) Exp Cell Res. 312(5):594-607
- 4. Amit Walia, et al. (2015) Biochim Biophys Acta. 1850(12):2422-38.

Synonyms

COL18, COL18A1, Collagen Type XVIII, Endostatin, Collagen alpha 1(XVIII) chain

Selected Validation Data



Purity of Recombinant Human COL18A1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.