

For Research Use Only

Recombinant Mouse Lumican protein (rFc Tag)(HPLC verified)



Catalog Number: Eg2481

Basic Information

Species:
Mouse

Purity:
>90 %, SDS-PAGE
>90 %, SEC-HPLC

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE
>90 %, SEC-HPLC

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Mouse Lumican protein Gln19-Asn338 (Accession# P51885) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
17022

Accession:
P51885

Predicted Molecular Mass:
62.6 kDa

SDS-PAGE:
65-75 kDa, reducing (R) conditions

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°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C 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

Lumican (LUM), a member of the small leucine-rich proteoglycan (SLRP) family, is one of the major extracellular components in interstitial collagenous matrices of the corneal stroma, aorta, skin, skeletal muscle, lung, kidney, bone, cartilage, and intervertebral discs. SLRPs constitute an important fraction of noncollagenous extracellular matrix proteins and have important effects on cell behavior. Lumican regulates collagenous matrix assembly as a keratan sulfate proteoglycan in the cornea and may exist as a glycoprotein in the connective tissues of other organs. Posttranslational modifications lumican goes through can increase its apparent molecular weight to 50-90 kDa. Studies show that lumican participates in the maintenance of tissue homeostasis and modulates cellular functions including cell proliferation, migration, and differentiation. (PMID: 18949819; 22252641; 9761754; 22365843)

References

1. Nikitovic D. et al. (2008). IUBMB Life. 60(12):818-23.
2. Liu CY. et al. (2012). Methods Mol Biol. 836:285-90.
3. Dolhnikoff M. et al. (1998). Am J Respir Cell Mol Biol. 19(4):582-7.
4. Yang CH. et al. (2012). Vet J. 193(2):374-80.

Synonyms

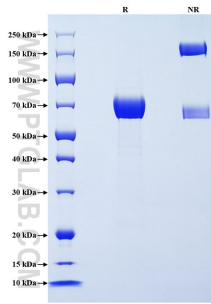
Keratan sulfate proteoglycan lumican, KSPG lumican, Lcn, Ldc, Lum

For technical support and original validation data for this product please contact

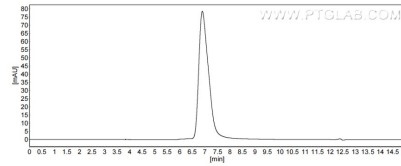
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data



Purity of Recombinant Mouse Lumican 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.



The purity of Mouse Lumican was greater than 90% as determined by SEC-HPLC.