# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 19-338aa

**UniProt No.** P51884

NCBI Accession No. NP\_002336

Alternative Names Lumican precursor, Lumican precursor, LDC, SLRR2D

# **PRODUCT SPECIFICATION**

Molecular Weight 39 kDa (343aa)

**Concentration** 1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 90% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE, Denatured

## **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

LuM is a member of the small leucine-rich proteoglycan (SLRP) family that includes decorin, biglycan, fibromodulin, keratocan, epiphycan, and osteoglycin. In these bifunctional molecules, the protein moiety binds collagen fibrils and the highly charged hydrophilic glycosaminoglycans regulate interfibrillar spacings. Lumican is the major keratan sulfate proteoglycan of the cornea but is also distributed in interstitial collagenous matrices throughout the body. Lumican may regulate collagen fibril organization and circumferential growth, corneal transparency, and epithelial cell migration and tissue repair. Recombinant human LuM protein, fused to His-tag



at N-terminus, was expressed in E. coli.

#### **Amino acid Sequence**

<MGSSHHHHHH SSGLVPRGSH MGS>QYYDYDF PLSIYGQSSP NCAPECNCPE SYPSAMYCDE LKLKSVPMVP PGIKYLYLRN NQIDHIDEKA FENVTDLQWL ILDHNLLENS KIKGRVFSKL KQLKKLHINH NNLTESVGPL PKSLEDLQLT HNKITKLGSF EGLVNLTFIH LQHNRLKEDA VSAAFKGLKS LEYLDLSFNQ IARLPSGLPV SLLTLYLDNN KISNIPDEYF KRFNALQYLR LSHNELADSG IPGNSFNVSS LVELDLSYNK LKNIPTVNEN LENYYLEVNQ LEKFDIKSFC KILGPLSYSK IKHLRLDGNR ISETSLPPDM YECLRVANEV TLN

### **General References**

Chakravarti S, Stallings RL, et al. (1995). Genomics. 27(3):481-8.

## DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.