
Product Data Sheet

Product Name: LUM Human
 Cat. No.: GP23846
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Lumican; LDC; Lumican Proteoglycan; Keratan Sulfate Proteoglycan Lumican; SLRR2D; KSPG Lumican.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MGSQYYDYDF 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.		
Formulation	LUM protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 0.4M Urea and 10% glycerol.		

Introduction

Lumican also known as LUM belongs to the small leucine-rich proteoglycan (SLRP) family which comprises decorin, biglycan, fibromodulin, keratan, epiphykan, and osteoglycin. Furthermore we can see that in these bifunctional molecules, the protein moiety binds collagen fibrils and the highly charged hydrophilic glycosaminoglycans regulate inter-fibrillar spacings. Lumican is the main keratan sulfate proteoglycan of the cornea however LUM is also distributed in interstitial collagenous matrices throughout the body. Lumican regulates collagen fibril organization and circumferential growth, corneal transparency, epithelial cell migration and tissue repair. Among the diseases associated with LUM is posterior amorphous corneal dystrophy.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze thaw cycles.

Background

LUM Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 343 amino acids (19-338a.a) and having a molecular mass of 39kDa. LUM is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA