

## Monoclonal Antibody to Lumican

**Catalog Number 1042007**

*For research use only*

<b>INTRODUCTION</b>	Lumican belongs to the Small Leucine Rich Proteoglycan (SLRP) family. It is a proteoglycan expressed in extracellular matrix (ECM) and connective tissues where it has been reported to contribute to collagen fibrillogenesis, tissue hydration, migration and proliferation. Lumican modified with keratan sulphate constitutes one of the major proteoglycans of the corneal stroma, where it stimulates cell migration on the corneal epithelium and is also believed to play a regulatory role for keratocan. Both Lumican and Keratocan play a role in the development and maintenance of corneal transparency.
<b>CLONE</b>	Lum-1
<b>HOST</b>	Mouse
<b>ISOTYPE</b>	IgM
<b>PURITY</b>	Affinity purified on thiophilic column
<b>STORAGE BUFFER</b>	PBS, no preservatives
<b>FORM</b>	Liquid
<b>CONCENTRATION</b>	Please see vial label for concentration.
<b>STORAGE</b>	Store at -20°C. Avoid freeze/thaw cycles.
<b>EXPIRATION</b>	See Vial Label

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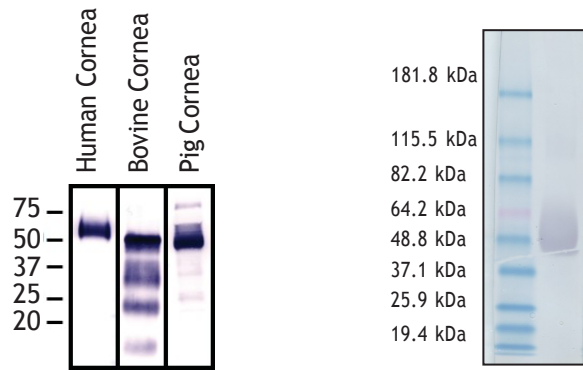
**SPECIFICITY**

This Lumican antibody recognises a protein epitope in lumican derived from human, bovine, porcine & mouse tissues.

**APPLICATION**

- ELISA
- Western Blot: recommended dilution 0.2 µg/mL
- IHC

Note: This epitope is best recognized after keratanase and keratanase II treatment/ digestion of section (IHC) or tissue extracts (for Western analyses). In some IHC tissue analyses, chondroitinase treatment may also be used, as this second enzyme treatment facilitates antibody penetration into the tissue.



Species Reactivity of Lum-1. Samples are treated with Keratanase and Keratanase II prior to electrophoresis.

Western Blot using anti-Lumican at a concentration of 0.2 µg/mL

**REFERENCES**

1. Fragmentation of decorin, biglycan, lumican and keratocan is elevated in degenerate human meniscus, knee and hip articular cartilages compared with age-matched macroscopically normal and control tissues. Melrose J, Fuller ES, Roughley PJ, Smith MM, Kerr B, Hughes CE, Caterson B, Little CB. (2008) **Arthritis Res Ther.** 10(4):R79.
2. Matrix morphogenesis in cornea is mediated by the modification of keratan sulfate by GlcNAc 6-O-sulfotransferase. Hayashida Y, Akama TO, Beecher N, Lewis P, Young RD, Meek KM, Kerr B, Hughes CE, Caterson B, Tanigami A, Nakayama J, Fukada MN, Tano Y, Nishida K, Quantock AJ. (2006) **Proc Natl Acad Sci U S A.** 5;103(36):13333-8.

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