

## Anti-Lumican Antibody Picoband™

Catalog Number: PB9662

### About Lum

Lumican, also known as LUM, is an extracellular matrix protein that, in humans, is encoded by the LUM gene on chromosome 12. Lumican is a major keratan sulfate proteoglycan of the cornea but is ubiquitously distributed in most mesenchymal tissues throughout the body. And Lumican is involved in collagen fibril organization and circumferential growth, corneal transparency, and epithelial cell migration and tissue repair. Corneal transparency is possible due to the exact alignment of collagen fibers by lumican (and keratocan) in the intrafibrillar space.

### Overview

Product Name	Anti-Lumican Antibody Picoband™
Reactive Species	Mouse
Description	Boster Bio Anti-Lumican Antibody Picoband™ catalog # PB9662. Tested in ELISA, IHC, WB applications. This antibody reacts with Mouse.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P51885

### Technical Details

Immunogen	E. coli-derived mouse Lumican recombinant protein (Position: I68-N338). Mouse Lumican shares 88.9% and 98.2% amino acid (aa) sequence identity with human and rat Lumican, respectively.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, By Heat</p> <p>ELISA , 0.1-0.5ug/ml, Mouse, -</p> <p>Western blot, 0.1-0.5ug/ml, Mouse</p>

## Anti-Lumican Antibody Picoband™ (PB9662) Images

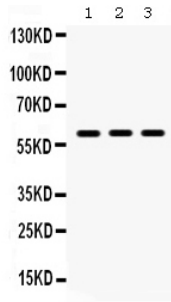


Figure 1. Western blot analysis of Lumican using anti-Lumican antibody (PB9662). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: Mouse Testis Tissue Lysate at 50ug, Lane 2: Mouse Thymus Tissue Lysate at 50ug, Lane 3: NIH3T3 Whole Cell Lysate at 40ug. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Lumican antigen affinity purified polyclonal antibody (Catalog # PB9662) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Lumican at approximately 60 kDa. The expected band size for Lumican is at 38 kDa.

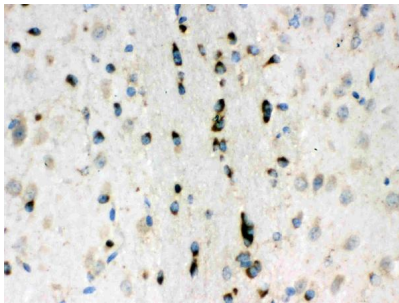


Figure 2. IHC analysis of Lumican using anti-Lumican antibody (PB9662). Lumican was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Lumican Antibody (PB9662) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

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