

## Rabbit Lumican Polyclonal Antibody | anti-LUM antibody

Anti-Lumican Antibody

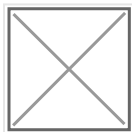
| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                              |
|-----------|--------|-------------------|-------------------------------------------|
| AAA124915 | Rabbit | Human, Mouse, Rat | ELISA, Immunohistochemistry, Western Blot |

### PRODUCT SYNONYMS

Lumican; Polyclonal Antibody; Anti-Lumican Antibody; Keratan sulfate proteoglycan lumican; KSPG lumican; LUM; LDC; SLRR2D; anti-LUM antibody

### PRODUCT SPECIFICATIONS

|                                               |                                                                                                                                                                                                               |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                          | Rabbit                                                                                                                                                                                                        |
| Reactivity                                    | Human, Mouse, Rat                                                                                                                                                                                             |
| Clonality                                     | Polyclonal                                                                                                                                                                                                    |
| Isotype                                       | IgG                                                                                                                                                                                                           |
| Specificity                                   | No cross reactivity with other proteins.                                                                                                                                                                      |
| Purity/Purification                           | Immunogen Affinity Purified                                                                                                                                                                                   |
| Form/Format                                   | Lyophilized                                                                                                                                                                                                   |
| Sequence Length                               | 338                                                                                                                                                                                                           |
| Applicable Applications for anti-LUM antibody | ELISA (Direct ELISA), IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                           |
| Immunogen                                     | E Coli-derived human Lumican recombinant protein (Position: A50-N338).                                                                                                                                        |
| Reconstitution                                | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                          |
| Relevant Detection Systems                    | It is recommended to use an Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC-P.                                         |
| Preparation and Storage                       | Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time.<br>Avoid repeated freezing and thawing. |



**IHC (Immunohistochemistry)**

Figure 3. IHC analysis of Lumican using anti-Lumican antibody. Lumican was detected in paraffin-embedded section of human ovary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Lumican antibody. Lumican was detected in paraffin-embedded section of human ovary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Lumican antibody. Lumican was detected in paraffin-embedded section of human pancreatic cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Lumican antibody. Lumican was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Lumican Antibody overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



**WB (Western Blot)**

Figure 1. Western blot analysis of Lumican using anti-Lumican antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates, Lane 2: human Caco-2 whole cell lysate, Lane 3: human CCRF-CEM whole cell lysate, Lane 4: human Hela whole cell lysate, Lane 5: human Jurkat whole cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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 at 0.5 ug/ml overnight at 4 degree 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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Lumican at approximately 58KD. The expected band size for Lumican is at 38KD.

ADDITIONAL INFORMATION

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-LUM antibody | Description: Rabbit IgG polyclonal antibody for Lumican detection. Tested with WB, IHC-P, Direct ELISA in Human; Mouse; Rat.<br>Background: 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. |
| References                                        | 1. "Entrez Gene: LUM lumican". 2. Chakravarti S, Stallings RL, SundarRaj N, Cornuet PK, Hassell JR (Jun 1995). "Primary structure of human lumican (keratan sulfate proteoglycan) and localization of the gene (LUM) to chromosome 12q21.3-q22". Genomics27 (3): 481-8. 3. Chakravarti S (2002). "Functions of lumican and fibromodulin: lessons from knockout mice". Glycoconjugate Journal 19 (4-5): 287-93.                                                                                                                                                                                                                                                                                                            |

NCBI AND UNIPROT INFORMATION

|                                  |                        |
|----------------------------------|------------------------|
| NCBI GI #                        | 4505047                |
| NCBI GeneID                      | 4060                   |
| NCBI Accession #                 | NP_002336.1            |
| NCBI GenBank Nucleotide #        | NM_002345.4            |
| UniProt Accession #              | P51884; Q96QM7; B2R6R5 |
| Molecular Weight                 | 38,429 Da              |
| NCBI Official Full Name          | lumican                |
| NCBI Official Synonym Full Names | lumican                |
| NCBI Official Symbol             | LUM                    |
| NCBI Official Synonym Symbols    | LDC; SLRR2D            |

|                            |                           |
|----------------------------|---------------------------|
| NCBI Protein Information   | lumican                   |
| UniProt Protein Name       | Lumican                   |
| UniProt Gene Name          | LUM                       |
| UniProt Synonym Gene Names | LDC; SLRR2D; KSPG lumican |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/lumican-antibody-direct-elisa-immunohistochemistry-western-blot-elisa/124915>