

## Anti-Galectin-3/LGALS3 Antibody

**Catalog # ABO11793** 

## **Specification**

# Anti-Galectin-3/LGALS3 Antibody - Product Information

Application WB, IHC-P
Primary Accession P17931
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Galectin-3(LGALS3) detection. Tested with WB, IHC-P in Human.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-Galectin-3/LGALS3 Antibody - Additional Information

#### **Gene ID 3958**

#### **Other Names**

Galectin-3, Gal-3, 35 kDa lectin, Carbohydrate-binding protein 35, CBP 35, Galactose-specific lectin 3, Galactoside-binding protein, GALBP, IgE-binding protein, L-31, Laminin-binding protein, Lectin L-29, Mac-2 antigen, LGALS3, MAC2

### **Calculated MW**

26152 MW KDa

#### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>blot, 0.1-0.5  $\mu$ g/ml, Human<br/>br>

### **Subcellular Localization**

Cytoplasm. Nucleus. Secreted. Secreted by a non-classical secretory pathway and associates with the cell surface.

#### **Tissue Specificity**

A major expression is found in the colonic epithelium. It is also abundant in the activated macrophages. Expressed in fetal membranes. .

### **Protein Name**

Galectin-3

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

#### **Immunogen**

E.coli-derived human Galectin 3 recombinant protein (Position: K139-I250). Human Galectin 3





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shares 88% and 84% amino acid (aa) sequences identity with mouse and rat Galectin 3, respectively.

**Purification** 

Immunogen affinity purified.

**Cross Reactivity** 

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities** Contains 1 galectin domain.

# Anti-Galectin-3/LGALS3 Antibody - Protein Information

Name LGALS3 (HGNC:6563)

Synonyms MAC2

#### **Function**

Galactose-specific lectin which binds IgE. May mediate with the alpha-3, beta-1 integrin the stimulation by CSPG4 of endothelial cells migration. Together with DMBT1, required for terminal differentiation of columnar epithelial cells during early embryogenesis (By similarity). In the nucleus: acts as a pre-mRNA splicing factor. Involved in acute inflammatory responses including neutrophil activation and adhesion, chemoattraction of monocytes macrophages, opsonization of apoptotic neutrophils, and activation of mast cells. Together with TRIM16, coordinates the recognition of membrane damage with mobilization of the core autophagy regulators ATG16L1 and BECN1 in response to damaged endomembranes.

#### **Cellular Location**

Cytoplasm. Nucleus. Secreted. Note=Secreted by a non- classical secretory pathway and associates with the cell surface. Can be secreted; the secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum- Golgi intermediate compartment) followed by vesicle entry and secretion (PubMed:32272059).

## **Tissue Location**

A major expression is found in the colonic epithelium. It is also abundant in the activated macrophages. Expressed in fetal membranes.

# Anti-Galectin-3/LGALS3 Antibody - Protocols

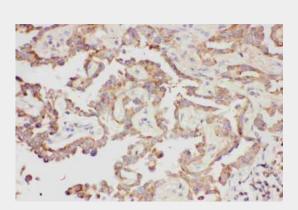
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

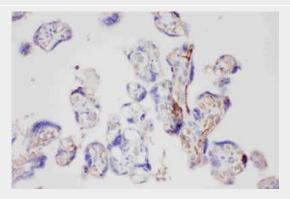


- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

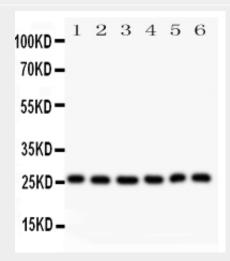
# **Anti-Galectin-3/LGALS3 Antibody - Images**



Anti-Galectin 3 Picoband antibody, ABO11793-1.JPGIHC(P): Human Lung Cancer Tissue



Anti-Galectin 3 Picoband antibody, ABO11793-2.JPGIHC(P): Human Placenta Tissue



Anti-Galectin 3 Picoband antibody, ABO11793-3.jpgAll lanes: Anti-Galectin-3(ABO11793) at 0.5ug/mlLane 1: Hela Whole Cell Lysate at 40ugLane 2: SGC Whole Cell Lysate at 40ugLane 3: MCF-7 Whole Cell Lysate at 40ugLane 4: SW620 Whole Cell Lysate at 40ugLane 5: A375 Whole Cell Lysate at 40ugLane 6: Smmc Whole Cell Lysate at 40ugPredicted bind size: 26KDObserved bind size: 26KD

# Anti-Galectin-3/LGALS3 Antibody - Background





Galectin-3(GAL3), also known as LGALS3, MAC2 or GALBP, is a member of the lectin family, of which 14 mammalian galectins have been identified. Galectin-3 is encoded by a single gene, it located on chromosome 14, locus q21â€"q22. It is expressed in the nucleus, cytoplasm, mitochondrion, cell surface, and extracellular space. Studies have also shown that the expression of galectin-3 is implicated in a variety of processes associated with heart failure, including myofibroblast proliferation, fibrogenesis, tissue repair, inflammation, and Ventricular remodeling. Galectin-3 is expressed in various tissues and organs, but is significantly absent in normal hepatocytes.