

Anti-Galectin-1 Antibody

Catalog # ABO11930

### Specification

# Anti-Galectin-1 Antibody - Product Information

ApplicationWB, IHC, ICCPrimary AccessionP09382HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Galectin-1(LGALS1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human:Mouse:Rat.

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

## Anti-Galectin-1 Antibody - Additional Information

Gene ID 3956

**Other Names** 

Galectin-1, Gal-1, 14 kDa laminin-binding protein, HLBP14, 14 kDa lectin, Beta-galactoside-binding lectin L-14-I, Galaptin, HBL, HPL, Lactose-binding lectin 1, Lectin galactoside-binding soluble 1, Putative MAPK-activating protein PM12, S-Lac lectin 1, LGALS1

Calculated MW 14716 MW KDa

**Application Details** 

Immunocytochemistry , 0.5-1 µg/ml, Human, Rat, -<br>Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Human, Rat, -<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>br>Western blot, 0.1-0.5 µg/ml, Human, Rat<br>

Subcellular Localization Secreted, extracellular space, extracellular matrix .

### Tissue Specificity

Expressed in placenta, maternal decidua and fetal membranes. Within placenta, expressed in trophoblasts, stromal cells, villous endothelium, syncytiotrophoblast apical membrane and villous stroma. Within fetal membranes, expressed in amnion, chorioamniotic mesenchyma and chorion (at protein level). Expressed in cardiac, smooth, and skeletal muscle, neurons, thymus, kidney and hematopoietic cells.

Protein Name Galectin-1

Contents



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

Immunogen

E.coli-derived human Galectin 1 recombinant protein (Position: A2-D135). Human Galectin 1 shares 88% and 90% amino acid (aa) sequences identity with mouse and rat Galectin 1, 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-1 Antibody - Protein Information

Name LGALS1 (HGNC:6561)

### Function

Lectin that binds beta-galactoside and a wide array of complex carbohydrates. Plays a role in regulating apoptosis, cell proliferation and cell differentiation. Inhibits CD45 protein phosphatase activity and therefore the dephosphorylation of Lyn kinase. Strong inducer of T-cell apoptosis.

### **Cellular Location**

Secreted, extracellular space, extracellular matrix. Cytoplasm. Secreted Note=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.

### **Tissue Location**

Expressed in placenta, maternal decidua and fetal membranes. Within placenta, expressed in trophoblasts, stromal cells, villous endothelium, syncytiotrophoblast apical membrane and villous stroma. Within fetal membranes, expressed in amnion, chorioamniotic mesenchyma and chorion (at protein level). Expressed in cardiac, smooth, and skeletal muscle, neurons, thymus, kidney and hematopoietic cells.

### Anti-Galectin-1 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



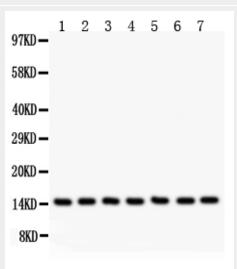
Flow Cytomety

<u>Cell Culture</u>

Anti-Galectin-1 Antibody - Images

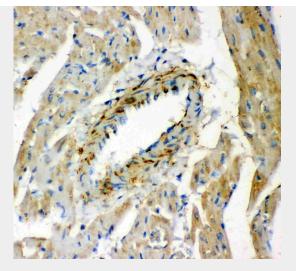


Anti- Galectin1 antibody, ABO11930, Western blottingAll lanes: Anti Galectin1(ABO11930) at 0.5ug/mlWB: Recombinant Human Galectin1 Protein 0.5ngPredicted bind size: 16KDObserved bind size: 16KD

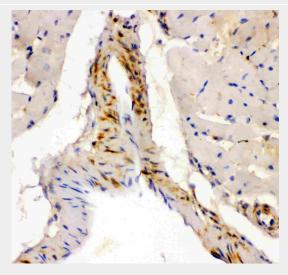


Anti- Galectin1 antibody, ABO11930, Western blottingAll lanes: Anti Galectin1(ABO11930) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Rat Brain Tissue Lysate at 50ugLane 3: Rat Liver Tissue Lysate at 50ugLane 4: Rat Kidney Tissue Lysate at 50ugLane 5: HELA Whole Cell Lysate at 40ugLane 6: SMMC Whole Cell Lysate at 40ugLane 7: NRK Whole Cell Lysate at 40ugPredicted bind size: 15KDObserved bind size: 15KD

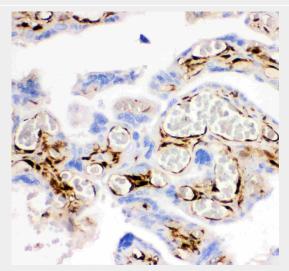




Anti- Galectin1 antibody, ABO11930,IHC(P)IHC(P): Rat Cardiac Muscle Tissue

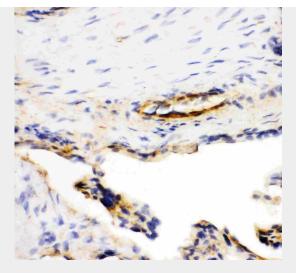


Anti- Galectin1 antibody, ABO11930,IHC(P)IHC(P): Mouse Cardiac Muscle Tissue

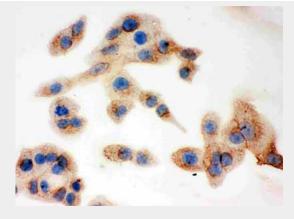


Anti- Galectin1 antibody, ABO11930,IHC(P)IHC(P): Human Placenta Tissue





Anti- Galectin1 antibody, ABO11930,IHC(F)IHC(F): Human Placenta Tissue



Anti- Galectin1 antibody, ABO11930,ICCICC: A549 Cell Anti-Galectin-1 Antibody - Background

Galectin-1 is a protein that in humans is encoded by the LGALS1 gene. The galectins are a family of beta-galactoside-binding proteins implicated in modulating cell-cell and cell-matrix interactions. Galectin-1 may act as an autocrine negative growth factor that regulates cell proliferation. Galectin-1 expression in Hodgkin Lymphoma has also been shown to mediate immunosuppression of CD8+ T-cells. It is thought to play a role in creating immune tolerance in pregnancy. It has been found that Galectin-1-mediated production of IL6 may assist in augmenting the innate immune response against NiV. Galectin-1 may also be a significant factor that augments the efficiency of the HIV-1 infection process.