

**Anti-Galectin-1 Antibody**  
Catalog # ABO11931**Specification****Anti-Galectin-1 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P09382</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Galectin-1(LGALS1) detection. Tested with WB, IHC-P, ELISA 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**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat  
ELISA , 0.1-0.5 µg/ml, Human, Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

#### Immunogen

E. coli-derived human Galectin 1 recombinant protein (Position: A2-D135). Human Galectin 1 shares 88% and 90% amino acid (aa) sequence 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 reconstitution, 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.**

### 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. Plays a negative role in Th17 cell differentiation via activation of the receptor CD69 (PubMed:<a href="http://www.uniprot.org/citations/24752896" target="\_blank">24752896</a>).

#### 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.

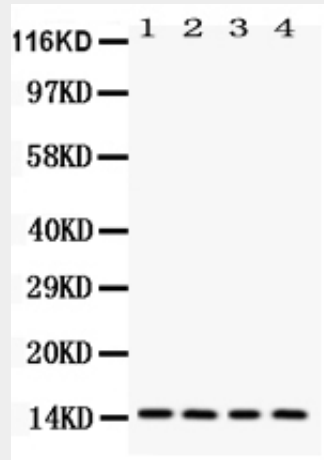
### Anti-Galectin-1 Antibody - Protocols

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

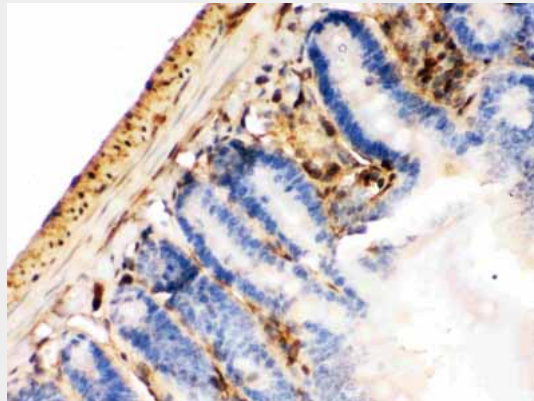
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

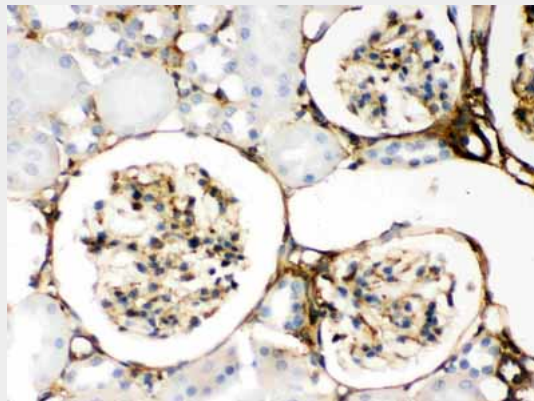
**Anti-Galectin-1 Antibody - Images**



Western blot analysis of Galectin 1 expression in rat testis extract (lane 1), mouse spleen extract (lane 2), HELA whole cell lysates (lane 3) and SMMC whole cell lysates (lane 4). Galectin 1 at 15KD was detected using rabbit anti- Galectin 1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11931) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

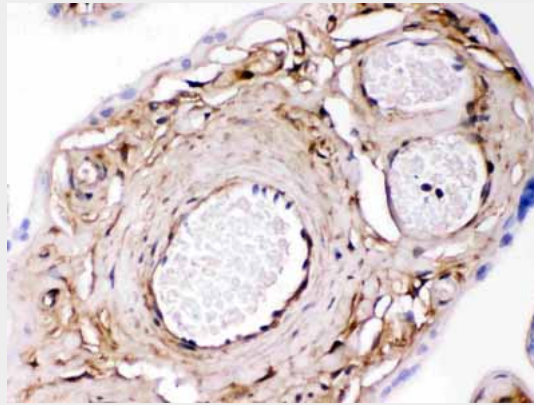


Galectin 1 was detected in paraffin-embedded sections of mouse intestine cancer tissues using rabbit anti- Galectin 1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11931) at 1 µg/mL. The immunohistochemical section was developed using SABC method .



Galectin 1 was detected in paraffin-embedded sections of rat kidney tissues using rabbit anti- Galectin 1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11931) at 1 µg/mL. The

immunohistochemical section was developed using SABC method (Catalog # SA2010).



Galectin 1 was detected in paraffin-embedded sections of human placenta tissues using rabbit anti- Galectin 1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11931) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .

### **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.