

Anti-Galectin-1 Antibody

Catalog # ABO11931

Specification

Anti-Galectin-1 Antibody - Product Information

ApplicationWB, IHC-P, EPrimary AccessionP09382HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Galectin-1(LGALS1) detection. Tested with WB, IHC-P, ELISA inHuman;Mouse;Rat.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 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) 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 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.

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:24752896).

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



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) at0.5 \hat{l}_{4}^{4} g/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 ??g/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 \hat{l}_4 g/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 \hat{I}_{4} 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.