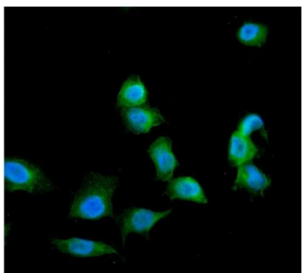
Galectin Polyclonal Antibody (R30492)

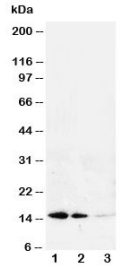
Catalog No.	Formulation	Size
R30492	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

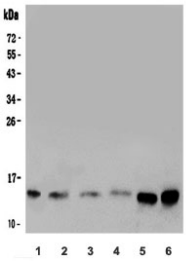
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P09382
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Immunohistochemistry (frozen): 1-2ug/ml Immunofluorescence (FFPE): 2-4ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This Galectin Polyclonal Antibody is available for research use only.



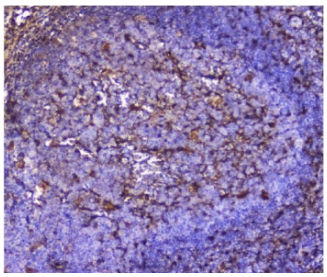
Galectin Polyclonal Antibody U-2 OS IF. Immunofluorescent staining of FFPE human U-2 OS cells using Galectin antibody demonstrates cytoplasmic green fluorescence throughout the cell body, consistent with the known intracellular localization of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in immune regulation, cell adhesion, apoptosis, and glycan-mediated signaling. The staining pattern is predominantly cytoplasmic with limited nuclear localization, while DAPI nuclear counterstain (blue) clearly identifies cell nuclei. These results support the utility of the Galectin antibody for immunofluorescent detection of endogenous Galectin-1 expression in FFPE cell preparations. HIER: steam section in pH6 citrate buffer for 20 min.



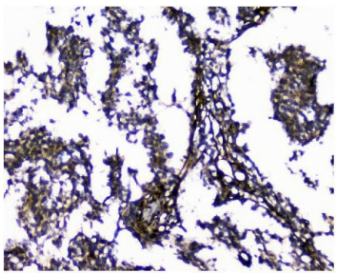
Western blot testing of Galectin antibody and Lane 1: recombinant human protein 10ng; 2: 5ng; 3: 2.5ng.



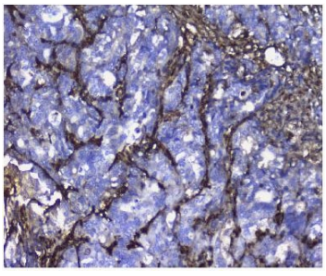
Galectin Antibody Human Cell Line WB. Western blot analysis of 1) human HeLa, 2) human MCF7, 3) human COLO-320, 4) human A549, 5) human 22RV1, and 6) human A375 cell lysates using Galectin antibody. A distinct immunoreactive band is detected at approximately 14 kDa across all six cell lines, consistent with the expected molecular weight of Galectin-1 (LGALS1). Signal intensity varies between cell types, with stronger expression observed in 22RV1 and A375 cells. Galectin-1 is a beta-galactoside-binding lectin involved in immune regulation, cell adhesion, apoptosis, angiogenesis, and glycan-mediated signaling pathways. The results support the utility of the Galectin antibody for western blot detection of endogenous Galectin-1 expression in diverse human cancer cell lines. Predicted molecular weight: ~14 kDa.



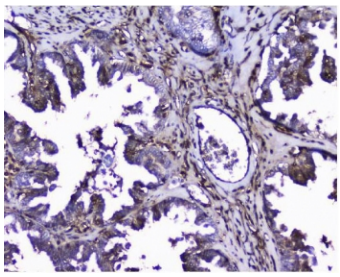
Galectin Polyclonal Antibody Human Tonsil IHC. Immunohistochemical staining of FFPE human tonsil tissue using Galectin antibody demonstrates membranous and cytoplasmic HRP-DAB brown staining within scattered immune cell populations distributed throughout the lymphoid compartment. The observed staining pattern is consistent with expression of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in immune regulation, lymphocyte function, apoptosis, and glycan-mediated cell signaling. Positive cells are present within the tonsillar immune microenvironment, supporting the established role of Galectin-1 in regulating adaptive immune responses and cellular communication within lymphoid tissues. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



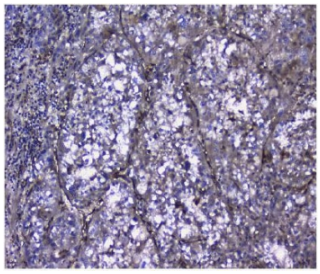
Galectin Polyclonal Antibody Human Glioma IHC. Immunohistochemical staining of FFPE human glioma tissue using Galectin antibody demonstrates strong membranous and cytoplasmic HRP-DAB brown staining within neoplastic cells and tumor-associated cellular structures. The staining pattern is consistent with expression of Galectin-1 (LGALS1), a beta-galactoside-binding lectin implicated in cell adhesion, immune modulation, extracellular matrix interactions, angiogenesis, and tumor progression. Robust Galectin-1 immunoreactivity within the glioma microenvironment supports the established association of LGALS1 with malignant behavior and tumor-stromal communication in central nervous system cancers. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



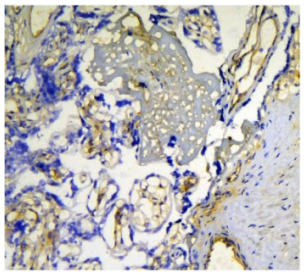
Galectin Polyclonal Antibody Human Stomach Cancer IHC. Immunohistochemical staining of FFPE human stomach cancer tissue using Galectin antibody demonstrates strong membranous and cytoplasmic HRP-DAB brown staining within malignant epithelial cells and tumor-associated cellular structures. The observed staining pattern is consistent with expression of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in cell adhesion, immune regulation, extracellular matrix remodeling, angiogenesis, and tumor progression. Prominent Galectin-1 immunoreactivity within the gastric tumor microenvironment supports its recognized role in tumor-stromal interactions, metastatic potential, and glycan-mediated signaling pathways associated with cancer development. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



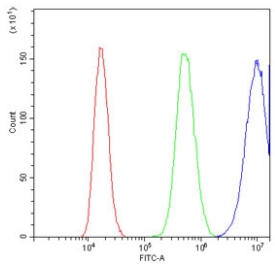
Galectin Polyclonal Antibody Human Ovarian Cancer IHC. Immunohistochemical staining of FFPE human ovarian cancer tissue using Galectin antibody demonstrates moderate to strong cytoplasmic and membranous HRP-DAB brown staining within malignant epithelial cells and associated stromal elements. The staining pattern is consistent with expression of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in cell adhesion, immune modulation, extracellular matrix remodeling, angiogenesis, and tumor progression. Prominent Galectin-1 immunoreactivity within both tumor and stromal compartments highlights its role in tumor microenvironment regulation and glycan-mediated signaling pathways associated with ovarian cancer biology. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Galectin Polyclonal Antibody Human Liver Cancer IHC. Immunohistochemical staining of FFPE human liver cancer tissue using Galectin antibody demonstrates moderate to strong cytoplasmic and membranous HRP-DAB brown staining throughout malignant tumor cell populations. The observed staining pattern is consistent with expression of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in immune regulation, cell adhesion, extracellular matrix remodeling, angiogenesis, and tumor progression. Widespread Galectin-1 immunoreactivity within the neoplastic tissue supports its established role in tumor microenvironment signaling and hepatocellular malignancy biology. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Galectin Polyclonal Antibody Human Placenta IHC. Immunohistochemical staining of frozen human placenta tissue using Galectin antibody demonstrates membranous and cytoplasmic HRP-DAB brown staining within placental trophoblast-associated cellular structures. The staining pattern is consistent with expression of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in cell adhesion, immune tolerance, extracellular matrix interactions, and maternal-fetal communication. Galectin-1 expression within placental tissues is associated with regulation of trophoblast function, angiogenesis, and immune homeostasis at the maternal-fetal interface. The observed immunoreactivity supports the utility of the Galectin antibody for detection of endogenous Galectin-1 in frozen tissue specimens.



Galectin Polyclonal Antibody PC-3 Flow Cytometry. Flow cytometry analysis of human PC-3 cells stained with Galectin antibody at 1 ug/million cells demonstrates a marked rightward shift of the positive population (blue) relative to the isotype control (green) and unstained cells (red). The observed fluorescence profile is consistent with expression of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in immune regulation, cell adhesion, apoptosis, angiogenesis, and tumor microenvironment signaling. The clear separation between antibody-stained and control populations supports specific detection of endogenous Galectin-1 in PC-3 cells and demonstrates the utility of this Galectin antibody for flow cytometric analysis. Cells were blocked with goat sera prior to staining.

Description

Galectin Polyclonal Antibody specifically detects Galectin 1, a protein that in humans is encoded by the LGALS1 gene. Galectins belong to a family of related beta-galactoside-binding lectins, also referred to as S-type or S-Lac lectins. Its gene is mapped to 22q12-q13. Galectin 1 was expressed in a subset of slowly dividing subventricular zone astrocytes, which included the neural stem cells. It has been considered as an autocrine negative growth factor that regulates cell proliferation.

Researchers studying glycan-dependent cell signaling, immune homeostasis, and Galectin-1 biology may also be interested in our Galectin 1 Antibody / Immune Regulation Protein Antibody.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Galectin Polyclonal Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human Galectin (NYMAADGDFKIKCVAFD) was used as the immunogen for this Galectin antibody.

Storage

After reconstitution, the Galectin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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