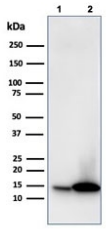
Galectin 1 Antibody / Immune Regulation Protein Antibody [clone GAL1/1831] (V3201)

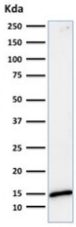
Catalog No.	Formulation	Size
V3201-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3201-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3201SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

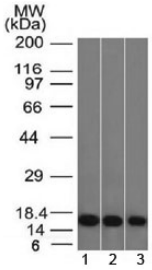
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, lambda
Clone Name	GAL1/1831
Purity	Protein G affinity chromatography
UniProt	P09382
Localization	Cytoplasmic, secreted
Applications	ELISA : 2-4ug/ml (order BSA/azide-free format) Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This Galectin 1 Antibody / Immune Regulation Protein Antibody is available for research use only.



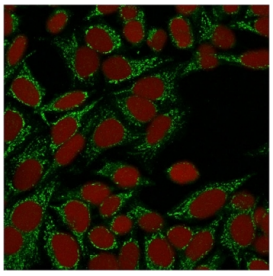
Galectin 1 Antibody Human JEG-3 and K562 WB. Western blot analysis of 1) human JEG-3 and 2) human K562 cell lysates using Galectin 1 antibody (clone GAL1/1831). A strong, distinct band is detected at approximately 14 kDa in both cell lines, consistent with the expected molecular weight of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in immune regulation, cell adhesion, angiogenesis, and tumor microenvironment signaling. The results demonstrate specific detection of endogenous Galectin-1 protein and support the utility of clone GAL1/1831 for western blot applications. Predicted molecular weight: ~14 kDa.



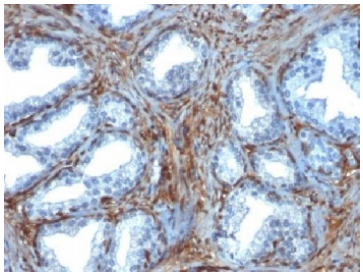
Galectin 1 Antibody HeLa WB. Western blot analysis of human HeLa cell lysate using Galectin 1 antibody (clone GAL1/1831). A distinct immunoreactive band is observed at approximately 14 kDa, corresponding to the expected molecular weight of Galectin-1 (LGALS1). Galectin-1 is a beta-galactoside-binding lectin that participates in immune regulation, cell-cell interactions, apoptosis, angiogenesis, and tumor microenvironment signaling. The clean banding pattern supports the specificity of clone GAL1/1831 for detection of endogenous Galectin-1 by western blot. Predicted molecular weight: ~14 kDa.



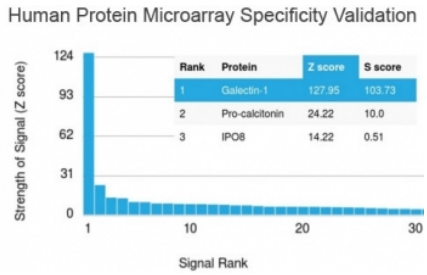
Galectin 1 Antibody Human Cell Line WB. Western blot analysis of 1) human HeLa, 2) human K562, and 3) human HEK293 cell lysates using Galectin 1 antibody (clone GAL1/1831). A strong, discrete band is detected at approximately 14 kDa in all three cell lines, consistent with the expected molecular weight of Galectin-1 (LGALS1). Galectin-1 is a beta-galactoside-binding lectin involved in immune regulation, cell adhesion, apoptosis, angiogenesis, and tumor microenvironment remodeling. The consistent detection of a single prominent band across multiple human cell lines supports the specificity and reliability of clone GAL1/1831 for western blot-based analysis of endogenous Galectin-1 expression. Predicted molecular weight: ~14 kDa.



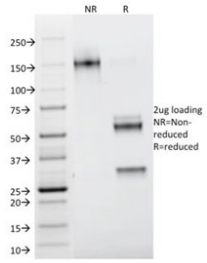
Galectin 1 Antibody HeLa IF. Immunofluorescent staining of permeabilized human HeLa cells using Galectin 1 antibody (clone GAL1/1831, green) demonstrates prominent cytoplasmic staining with a finely granular distribution throughout the cell body. The observed pattern is consistent with the known intracellular localization of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in immune regulation, cell adhesion, apoptosis, and extracellular matrix interactions. RedDot nuclear counterstain (red) clearly delineates cell nuclei, while Galectin-1 immunoreactivity is primarily excluded from the nuclear compartment and enriched within the cytoplasm. These results support the utility of clone GAL1/1831 for immunofluorescent detection of endogenous Galectin-1 expression in cultured human cells.



Galectin 1 Antibody Prostate Carcinoma IHC. Immunohistochemical staining of FFPE human prostate carcinoma tissue using Galectin 1 antibody (clone GAL1/1831) demonstrates strong cytoplasmic and stromal-associated HRP-DAB brown staining within the tumor microenvironment. Prominent immunoreactivity is observed in spindle-shaped stromal cells surrounding malignant glandular structures, consistent with the known expression pattern of Galectin-1 (LGALS1), a beta-galactoside-binding lectin involved in immune regulation, extracellular matrix remodeling, angiogenesis, and tumor progression. The staining pattern highlights both stromal and tumor-associated compartments and supports the use of clone GAL1/1831 for detection of Galectin-1 expression in FFPE tissue specimens. HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min.



Galectin 1 Antibody Protein Microarray Validation. Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using Galectin 1 antibody (clone GAL1/1831) demonstrates exceptional target specificity for Galectin-1 (LGALS1). The GAL1/1831 monoclonal antibody identifies Galectin-1 as the highest-ranking target with a Z-score of 127.95 and an S-score of 103.73, greatly exceeding all non-target proteins present on the array. These results confirm the foremost specificity of clone GAL1/1831 and provide strong evidence for selective recognition of Galectin-1 with minimal off-target reactivity. Z-score represents the signal strength generated by antibody binding to a specific protein relative to all proteins present on the array, while S-score reflects the specificity gap between the intended target and the next highest-ranking protein. An S-score greater than 2.5 is generally considered indicative of highly specific target recognition. The exceptionally high Z- and S-scores obtained for GAL1/1831 support its suitability for applications requiring accurate and reliable detection of Galectin-1 expression.



SDS-PAGE analysis of purified, BSA-free Galectin 1 antibody (clone GAL1/1831) as confirmation of integrity and purity.

Description

Galectin 1 Antibody / Immune Regulation Protein Antibody recognizes Galectin-1 (LGALS1), a member of the galectin family of beta-galactoside-binding lectins that regulates cell adhesion, migration, apoptosis, immune homeostasis, angiogenesis, and extracellular matrix interactions. Galectin-1 is widely expressed in epithelial, endothelial, stromal, and immune cell populations where it functions as a critical mediator of cellular communication and glycan-dependent signaling pathways. Through interactions with glycosylated cell surface receptors and extracellular matrix proteins, Galectin-1 influences tissue development, wound healing, inflammatory responses, and cellular differentiation.

Galectin 1 Antibody is valuable for studying the diverse biological activities of LGALS1 in both normal physiology and disease. Galectin-1 can be localized within the cytoplasm, nucleus, cell surface, and extracellular environment, allowing it to participate in multiple regulatory mechanisms. Unlike many secreted proteins, Galectin-1 lacks a classical signal peptide and is released through non-conventional secretion pathways. Its ability to form homodimers and bind beta-galactoside-containing glycoconjugates enables regulation of receptor clustering, signal transduction, and cell-cell interactions.

Galectin 1 Antibody has become increasingly important in immunology research due to the central role of Galectin-1 in immune regulation. The protein contributes to immune tolerance, modulation of inflammatory responses, and regulation of T-cell activation and survival. Expression of Galectin-1 has been associated with mechanisms that control both innate and adaptive immune responses, making LGALS1 a useful biomarker for investigations involving inflammation, autoimmune disease, infection, and immune microenvironment biology.

Galectin 1 Antibody is also widely used in cancer and angiogenesis research. Elevated Galectin-1 expression has been reported in numerous malignancies, where it may contribute to tumor progression, immune evasion, vascular remodeling, and metastatic behavior. The involvement of LGALS1 in tumor-stromal interactions and microenvironment regulation has generated significant interest in its potential as a biomarker and therapeutic target. Consequently, Galectin-1 continues to be extensively studied in oncology, vascular biology, glycobiology, and translational research applications.

This Galectin 1 Antibody, clone GAL1/1831, has been Protein Microarray Validated, providing additional confidence in

specificity for the detection of LGALS1 in immunohistochemistry, western blotting, immunofluorescence, flow cytometry, and related research applications.

Researchers studying tumor immune evasion, angiogenesis, and microenvironment remodeling may also be interested in our comprehensive collection of Cancer Antibodies.

Application Notes

Titering of the Galectin 1 Antibody / Immune Regulation Protein Antibody may be required for optimal performance.

Immunogen

A human partial recombinant protein corresponding to amino acids 12-108 was used as the immunogen for the Galectin 1 antibody.

Storage

Store the Galectin 1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Galectin-1 Antibody, LGALS1 Antibody, Gal-1 Antibody, Beta-galactoside Binding Lectin Antibody, Galaptin Antibody, Lectin Galactoside-Binding Soluble 1 Antibody, HBL Antibody, Lactose-Binding Lectin 1 Antibody