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LGALS9 / Galectin 9 Antibody (clone 1G3)

Mouse Monoclonal Antibody
Catalog # ALS17217

Specification

LGALS9 / Galectin 9 Antibody (clone 1G3) - Product Information

Application	**IHC-P, WB**
Primary Accession	O00182
Other Accession	3965
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a**
Calculated MW	**39518**

LGALS9 / Galectin 9 Antibody (clone 1G3) - Additional Information

Gene ID 3965

Other Names
LGALS9, Gal-9, HUAT, Galectin 9, Galectin-9, LGALS9A, Tumor antigen HOM-HD-21, Ecalectin

Target/Specificity
Human LGALS9 / Galectin 9

Reconstitution & Storage
PBS, pH 7.3, 1% BSA, 50% glycerol, 0.02% sodium azide. Store at -20°C. Minimize freezing and thawing.

Precautions
LGALS9 / Galectin 9 Antibody (clone 1G3) is for research use only and not for use in diagnostic or therapeutic procedures.

LGALS9 / Galectin 9 Antibody (clone 1G3) - Protein Information

Name LGALS9

Function
Binds galactosides (PubMed:18005988). Has high affinity for the Forssman pentasaccharide (PubMed:18005988). Ligand for HAVCR2/TIM3 (PubMed:16286920). Binding to HAVCR2 induces T-helper type 1 lymphocyte (Th1) death (PubMed:16286920). Also stimulates bactericidal activity in infected macrophages by causing macrophage activation and IL1B secretion which restricts intracellular bacterial growth (By similarity). Ligand for P4HB; the interaction retains P4HB at the cell surface of Th2 T-helper cells, increasing disulfide reductase activity at the plasma membrane, altering the plasma membrane

redox state and enhancing cell migration (PubMed:21670307). Ligand for CD44; the interaction enhances binding of SMAD3 to the FOXP3 promoter, leading to up-regulation of FOXP3 expression and increased induced regulatory T (iTreg) cell stability and suppressive function (By similarity). Promotes ability of mesenchymal stromal cells to suppress T-cell proliferation (PubMed:23817958). Expands regulatory T-cells and induces cytotoxic T-cell apoptosis following virus infection (PubMed:20209097). Activates ERK1/2 phosphorylation inducing cytokine (IL-6, IL-8, IL-12) and chemokine (CCL2) production in mast and dendritic cells (PubMed:24465902, PubMed:16116184). Inhibits degranulation and induces apoptosis of mast cells (PubMed:24465902). Induces maturation and migration of dendritic cells (PubMed:25754930, PubMed:16116184). Inhibits natural killer (NK) cell function (PubMed:23408620). Can transform NK cell phenotype from peripheral to decidual during pregnancy (PubMed:25578313). Astrocyte derived galectin-9 enhances microglial TNF production (By similarity). May play a role in thymocyte-epithelial interactions relevant to the biology of the thymus. May provide the molecular basis for urate flux across cell membranes, allowing urate that is formed during purine metabolism to efflux from cells and serving as an electrogenic transporter that plays an important role in renal and gastrointestinal urate excretion (By similarity). Highly selective to the anion urate (By similarity).

Cellular Location
Cytoplasm. Nucleus. Secreted. Note=May also be secreted by a non- classical secretory pathway (By similarity). Secreted by mesenchymal stromal cells upon IFNG stimulation (PubMed:23817958) {ECO:0000250|UniProtKB:O08573, ECO:0000269|PubMed:23817958} [Isoform 3]: Secreted

Tissue Location
Peripheral blood leukocytes and lymphatic tissues. Expressed in lung, liver, breast and kidney with higher levels in tumor endothelial cells than normal endothelium (at protein level) (PubMed:24333696). Expressed in trophoblast cells in decidua and placenta in pregnancy (at protein level) (PubMed:23242525, PubMed:25578313). Isoform 2 is the most abundant isoform expressed in endothelial cells (PubMed:24333696). Upon endothelial cell activation isoform 2 expression decreases while expression of isoform 3 and isoform 5 increases (PubMed:24333696). Isoform 4 decreases in pathological pregnancy (PubMed:23242525).

Volume
50 µl

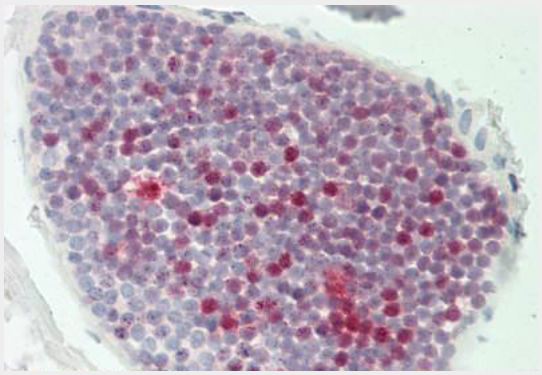
LGALS9 / Galectin 9 Antibody (clone 1G3) - Protocols

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

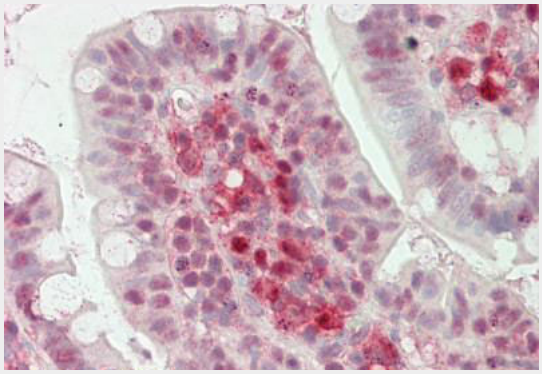
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety

- Cell Culture

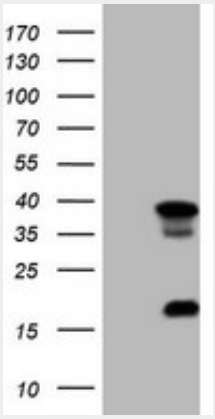
LGALS9 / Galectin 9 Antibody (clone 1G3) - Images



Human Tonsil: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Small Intestine: Formalin-Fixed, Paraffin-Embedded (FFPE)



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY LGALS9...

LGALS9 / Galectin 9 Antibody (clone 1G3) - Background

Binds galactosides. Has high affinity for the Forssman pentasaccharide. May play a role in thymocyte-epithelial interactions relevant to the biology of the thymus. Inhibits cell proliferation. It is a ligand for HAVCR2/TIM3. Induces T-helper type 1 lymphocyte (Th1) death. Isoform Short acts as an eosinophil chemoattractant.

LGALS9 / Galectin 9 Antibody (clone 1G3) - References

Tuereci O.,et al.J. Biol. Chem. 272:6416-6422(1997).
Kato S.,et al.Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.
Matsumoto R.,et al.J. Biol. Chem. 273:16976-16984(1998).
Nakajima H.,et al.Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases.
Akiyama S.,et al.Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.