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LGALS9 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP14853a

Specification

LGALS9 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession O00182

LGALS9 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3965

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LGALS9 Antibody (N-term) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/20209097"

target="_blank">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).

LGALS9 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

LGALS9 Antibody (N-term) Blocking Peptide - Images

LGALS9 Antibody (N-term) Blocking Peptide - Background

The galectins are a family of beta-galactoside-bindingproteins implicated in modulating cell-cell and cell-matrixinteractions. The protein encoded by this gene is an S-type lectin.It is overexpressed in Hodgkin's disease tissue and mightparticipate in the interaction between the H&RS cells with theirsurrounding cells and might thus play a role in the pathogenesis ofthis disease and/or its associated immunodeficiency. Multiplealternatively spliced transcript variants have been found for thisgene.

LGALS9 Antibody (N-term) Blocking Peptide - References

Dardalhon, V., et al. J. Immunol. 185(3):1383-1392(2010)Tanikawa, R., et al. Biochem. Biophys. Res. Commun. 394(2):317-322(2010)Katoh, S., et al. Int. Arch. Allergy Immunol. 153(3):294-302(2010)Niki, T., et al. J. Biol. Chem. 284(47):32344-32352(2009)Zhang, F., et al. Zhonghua Zhong Liu Za Zhi 31(2):95-98(2009)