

Galectin-9 Blocking Peptide
Catalog # PBV10376b**Specification**

Galectin-9 Blocking Peptide - Product Information

Primary Accession	O00182
Gene ID	3965
Calculated MW	39518

Galectin-9 Blocking Peptide - Additional Information**Gene ID** 3965**Application & Usage**

The peptide is used for blocking the antibody activity of galectin-9. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

Other Names

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

Target/Specificity

Galectin-9

Formulation

50 µg (0.5 mg/ml) Galectin-9 peptide in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

Galectin-9 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

Galectin-9 Blocking Peptide - Protein Information**Name** LGALS9**Function**

Binds galactosides (PubMed: <http://www.uniprot.org/citations/18005988> target="_blank">18005988). Has high affinity for the Forssman pentasaccharide (PubMed: <http://www.uniprot.org/citations/18005988> target="_blank">18005988). Ligand for HAVCR2/TIM3 (PubMed: <http://www.uniprot.org/citations/16286920>)

target="_blank">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).

Galectin-9 Blocking Peptide - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Galectin-9 Blocking Peptide - Images