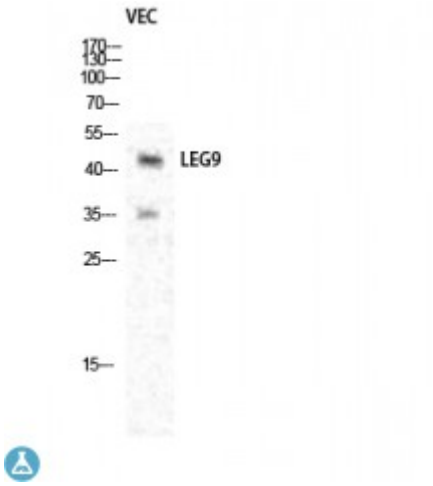
Anti-Galectin-9 antibody



Description	Rabbit polyclonal to Galectin-9.

Model	STJ93206
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human Galectin-9
Immunogen Region	30-110 aa, Internal
Gene ID	3965
Gene Symbol	LGALS9
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	Galectin-9 Polyclonal Antibody detects endogenous levels of Galectin-9 protein.
Tissue Specificity	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) . Expressed in trophoblast cells in decidua and placenta in pregnancy (at protein level) . Isoform 2 is the most abundant isoform expressed in endothelial cells . Upon endothelial cell activation isoform 2 expression decreases while expression of isoform 3 and isoform 5 increases . Isoform 4 decreases in pathological pregnanc
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Note	For Research Use Only (RUO).
Protein Name	Galectin-9 Gal-9 Tumor antigen HOM-HD-21
Molecular Weight	40/35 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6570OMIM:601879
Alternative Names	Galectin-9 Gal-9 Tumor antigen HOM-HD-21
Function	Binds galactosides . Has high affinity for the Forssman pentasaccharide . Ligand for HAVCR2/TIM3 . Binding to HAVCR2 induces T-helper type 1 lymphocyte (Th1) death . Also stimulates bactericidal activity in infected macrophages by causing macrophage activation and IL1B secretion which restricts intracellular bacterial growth . 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 . 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 . Promotes ability of mesenchymal stromal cells to suppress T-cell proliferation . Expands regulatory T-cells and induces cytotoxic T-cell apoptosis following virus infection . Activates ERK1/2 phosphorylation inducing cytokine (IL-6, IL-8, IL-12) and chemokine (CCL2) production in mast and dendritic cells . Inhibits degranulation and induces apoptosis of mast cells . Induces maturation and migration of dendritic cells . Inhibits natural killer (NK) cell function . Can transform NK cell phenotype from peripheral to decidual during pregnancy . Astrocyte derived galectin-9 enhances microglial TNF production . 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 . Highly selective to the anion urate . Isoform 2: Acts as an eosinophil chemoattractant . It also inhibits angiogenesis . Suppresses IFNG production by natural killer cells .
Sequence and Domain Family	Contains two homologous but distinct carbohydrate-binding domains.
Cellular Localization	Cytoplasm Nucleus Secreted. May also be secreted by a non-classical secretory pathway . Secreted by mesenchymal stromal cells upon IFNG stimulation . Isoform 2: Secreted Isoform 3: Secreted