

Product datasheet for **AR50711PU-N**

Galectin-9 (1-322, His-tag) Mouse Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Galectin-9 (1-322, His-tag) mouse recombinant protein, 0.25 mg
Species:	Mouse
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MGSMA LFSAQ SPYINPIIPF TGPIQGGLQE GLQVTLQGTT KSFAQRFVN FQNSFNGNDI AFHFNPRFEE GGYVVCNTKQ NGQWGPEERK MQMPFQKGMF FELCFLVQRS EFKVMVNKKF FVQYQHRVPY HLVDTIIVSG CLKLSFITFQ TQNFPAHQ PMAQTIIHMV HSTPGQMFST PGIPVVPYPT PAYTIPFYTP IPNGLYPSKS IMISGNVLPD ATRFHINLRC GGDIAFHLNP RFNENAVVRN TQINNSWGQE ERSLLGRMPF SRGQSFVWI ICEGHCFKVA VNGQHMCEYY HRLKNLQDIN TLEVAGDIQL THVQT
Tag:	His-tag
Predicted MW:	38.9 kDa
Concentration:	lot specific
Purity:	>90% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant mouse LGALS9 protein, fused to His-tag at N-terminus, was expressed in E.coli.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001152773
Locus ID:	16859
UniProt ID:	O08573
Cytogenetics:	11 B5
Synonyms:	AA407335; AI194909; AI265545; gal-9; galectin-9; Lgals5; LGALS35



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Summary:

Binds galactosides (By similarity). Has high affinity for the Forssman pentasaccharide (By similarity). Ligand for HAVCR2/TIM3 (By similarity). Binding to HAVCR2 induces T-helper type 1 lymphocyte (Th1) death (By similarity). Also stimulates bactericidal activity in infected macrophages by causing macrophage activation and IL1B secretion which restricts intracellular bacterial growth (PubMed:20937702). 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 (PubMed:25065622). Promotes ability of mesenchymal stromal cells to suppress T-cell proliferation (By similarity). Expands regulatory T-cells and induces cytotoxic T-cell apoptosis following virus infection (By similarity). Activates ERK1/2 phosphorylation inducing cytokine (IL-6, IL-8, IL-12) and chemokine (CCL2) production in mast and dendritic cells (By similarity). Inhibits degranulation and induces apoptosis of mast cells (By similarity). Induces maturation and migration of dendritic cells (By similarity). Inhibits natural killer (NK) cell function (PubMed:23408620). Can transform NK cell phenotype from peripheral to decidual during pregnancy (By similarity). Astrocyte derived galectin-9 enhances microglial TNF production (PubMed:25158758). 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).[UniProtKB/Swiss-Prot Function]

Product images: