

Datasheet for ABIN7554407

## Galectin 9 Protein (AA 1-355) (His tag)

3 Images



[Go to Product page](#)

### Overview

Quantity:	1 mg
Target:	Galectin 9 (LGALS9)
Protein Characteristics:	AA 1-355
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Galectin 9 protein is labelled with His tag.

### Product Details

Purpose:	Custom-made recombinant LGALS9 Protein expressed in mammalian cells.
Sequence:	<p>MAFSGSQAPY LSPAVPFSGT IQGGLQDGLQ ITVNGTVLSS SGTRFAVNQK TGFSGNDIAF</p> <p>HFNPRFEDGG YVVCNTRQNG SWGPEERKTH MPFQKGMFPD LCFLVQSSDF KVMVNGILFV</p> <p>QYFHRVPFHR VDTISVNGSV QLSYISFQNP RTVPVQPAFS TVPFSQPVCF PPRPRGRRQK</p> <p>PPGVWPANPA PITQTVIHTV QSAPGQMFST PAIPPMMPH PAYPMPFITT ILGGLYPSKS</p> <p>ILLSGTVLPS AQRFHINLCS GNHIAFHLNP RFDENAVVRN TQIDNSWGSE ERSRPRKMPF</p> <p>VRGQSFSVWI LCEAHCLKVA VDGQHLFEYY HRLRNLPTIN RLEVGGDIQL THVQT <b>Sequence</b></p> <p><b>without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p>
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

## Product Details

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- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

## Target Details

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Target:	Galectin 9 (LGALS9)
Alternative Name:	LGALS9 ( <a href="#">LGALS9 Products</a> )
Background:	<p>Galectin-9 (Gal-9) (Ecalectin) (Tumor antigen HOM-HD-21),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</p>

## Target Details

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). {ECO:0000250|UniProtKB:O08573, ECO:0000250|UniProtKB:P97840, ECO:0000269|PubMed:16116184, ECO:0000269|PubMed:16286920, ECO:0000269|PubMed:18005988, ECO:0000269|PubMed:18977853, ECO:0000269|PubMed:20209097, ECO:0000269|PubMed:21670307, ECO:0000269|PubMed:23408620, ECO:0000269|PubMed:23817958, ECO:0000269|PubMed:24465902, ECO:0000269|PubMed:25578313, ECO:0000269|PubMed:25754930}., FUNCTION: [Isoform 2]: Acts as an eosinophil chemoattractant (PubMed:9642261). It also inhibits angiogenesis (PubMed:24333696). Suppresses IFNG production by natural killer cells (By similarity). {ECO:0000250|UniProtKB:O08573, ECO:0000269|PubMed:24333696, ECO:0000269|PubMed:9642261}.

Molecular Weight: 39.5 kDa

UniProt: [O00182](#)

## Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

Format: Liquid

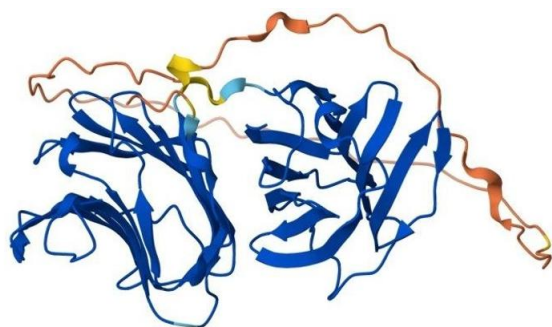
Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

## Handling

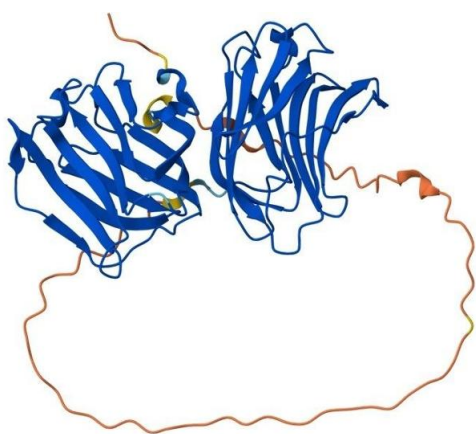
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

## Images



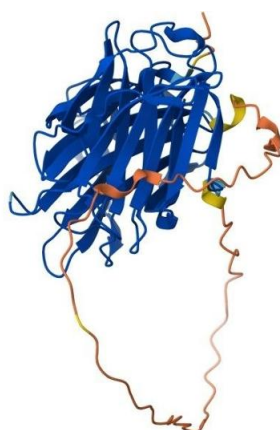
### Protein Structure

**Image 1.** AlphaFold protein structure prediction of Human Recombinant LGALS9 Protein, UniprotID O00182



### Protein Structure

**Image 2.** AlphaFold protein structure prediction of Human Recombinant LGALS9 Protein, UniprotID O00182



### Protein Structure

**Image 3.** AlphaFold protein structure prediction of Human Recombinant LGALS9 Protein, UniprotID O00182

