Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Recombinant Human Galectin-1/LGALS1 Protein

Catalog No.: RP00007 Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	3956	P09382

Tags
No tag

Synonyms
GAL1; GBP;LGALS1; GAL1; galectin-1;GBP;Galectin 1/LGALS1

Product Information

Source
E. coli

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
14.58 kDa

Observed MW
14 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Background

Galectin-1, also known as LGALS1 (lectin, galactoside-binding, soluble 1), is a 135 amino acid (aa), 14 kDa, pleiotropic, Non-glycosylated, monomeric or homodimeric carbohydrate-binding protein of the prototype galectin family. Galectins lack a classical signal peptide and can be localized to the cytosolic compartments, or secreted by non-classical pathways. Secreted Galectin-1 has immunosuppressive and anti-inflammatory properties and suppresses acute and chronic inflammation and autoimmunity. It contributes to negative selection of developing T cells, immunosuppression by regulatory T cells, resolution of the inflammatory response, and inhibition of immune cell migration, inflammatory cytokine production, and mast cell degranulation. Galectin-1 contributes to different steps of tumour progression including cell adhesion, migration and tumour-immune escape, suggesting that blockade of galectin-1 might result in therapeutic benefits in cancer. Several potential glycoprotein ligands for galectin-1 have been identified, including lysosome-associated membrane glycoproteins and fibronectin, laminin, as well as T-cell glycoproteins CD43 and CD45. Evidence points to Gal-1 and its ligands as one of the master regulators of such immune responses as T-cell homeostasis and survival, T-cell immune disorders, inflammation and allergies as well as host-pathogen interactions.

Basic Information

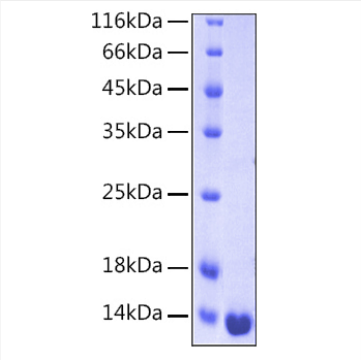
Description
Recombinant Human Galectin-1/LGALS1 Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Ala2-Asp135) of human Galectin-1 (Accession #NP_002296.1).

Bio-Activity
Measured by its ability to agglutinate mouse red blood cells. The ED_{50} for this effect is 0.5-3 μg/mL.

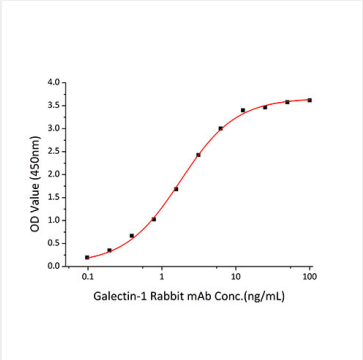
Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

* □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

Validation Data



Recombinant Human Galectin-1/LGALS1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized recombinant Human Galectin-1 at 0.5μg/mL (100 μL/well) can bind Galectin-1 Rabbit mAb with a linear range of 0.7-1.8 ng/mL.