

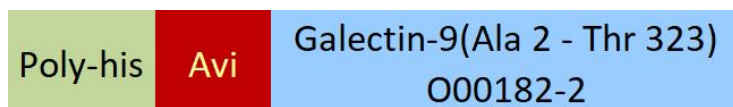
Synonym

Galectin-9, LGALS9, Ecalectin

Source

Biotinylated Human Galectin-9, His,Avitag(LG9-H82H3) is expressed from human 293 cells (HEK293). It contains AA Ala 2 - Thr 323 (Accession # [O00182-2](#)).

Predicted N-terminus: His

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 39.3 kDa. The protein migrates as 52-58 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 20 mM MOPS, 50 mM NaCl, 1 mM EDTA, 2 mM DTT, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

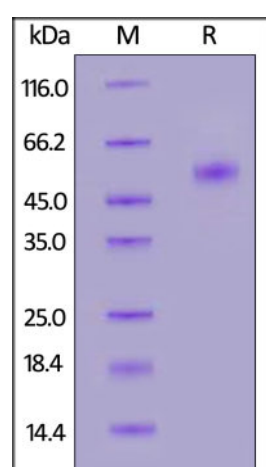
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

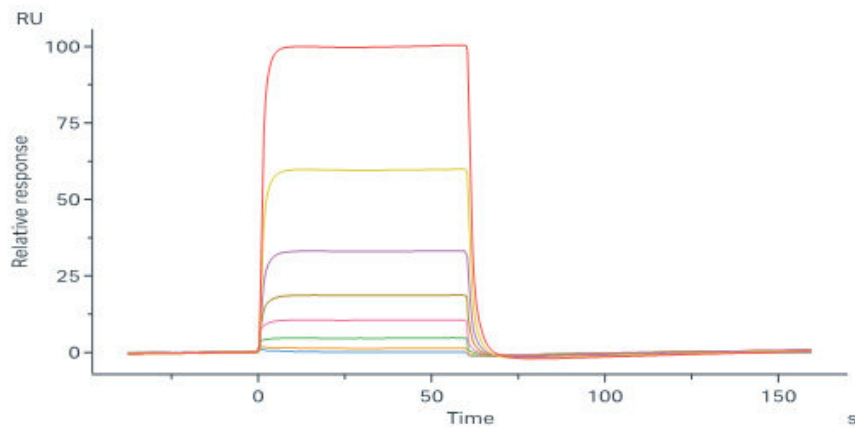
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Biotinylated Human Galectin-9, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-SPR



Human TIM-3 (22-200) Protein, Fc Tag (Cat. No. TM3-H5258) immobilized on CM5 Chip can bind Biotinylated Human Galectin-9, His,Avitag (Cat. No. LG9-H82H3) with an affinity constant of 7.66 μ M as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Galectin-9 (LGALS9) is also known as tumor antigen HOM-HD-21 and ecalectin. Galectins are a family of proteins defined by their binding specificity for β -galactoside sugars, such as N-acetyllactosamine (Gal β 1-3GlcNAc or Gal β 1-4GlcNAc), which can be bound to proteins by either N-linked or O-linked glycosylation. As for Galectin-9, it has high affinity for the Forssman pentasaccharide, and it is also the ligand for HAVCR2/TIM3. Furthermore, Galectin-9 stimulates bactericidal activity in infected macrophages by causing macrophage activation and IL1B secretion which restricts intracellular bacterial growth.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.