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## Recombinant Human Galectin-9 protein(His Tag)

Catalog Number: PKSH034185

Note: Centrifuge before opening to ensure complete recovery of vial contents.

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Species Human

Source E.coli-derived Human Galectin-9 protein Ala 2-Thr 323, with an N-terminal His

 Mol\_Mass
 36.7 kDa

 Accession
 000182-2

**Bio-activity** Measured by its ability of the immobilized protein to support the adhesion of Jurkat

cells. The ED50 for this effect is  $< 3 \mu g/mL$ .

**Properties** 

**Purity** > 98 % as determined by reducing SDS-PAGE.

Endotoxin < 0.1 EU per µg of the protein as determined by the LAL method.

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile PBS, pH 7.4.

Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

## Background

Galectin-9 is a cytoplasmic protein that contains two galectin domains. Galectin-9 is an S-type lectin that is over-expressed in Hodgkin's disease tissue. Galectin-9 binds galactosides and has high affinity for the Forssman pentasaccharide. Galectin-9 plays a role in thymocyte-epithelial interactions relevant to the biology of the thymus and Inhibits cell proliferation. Galectin-9 is a ligand for HAVCR2/TIM3 and induces T-helper type 1 lymphocyte (Th1) death. In addition, Galectin-9 suppresses tumor cell metastasis by interfering with the associations CD44, VCAM-1, Integrin  $\alpha$ 4  $\beta$ 1.