

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

**Catalog Number: PKSH034185**

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

### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human Galectin-9 protein Ala 2-Thr 323, with an N-terminal His
<b>Calculated MW</b>	36.7 kDa
<b>Observed MW</b>	37 kDa
<b>Accession</b>	O00182-2
<b>Bio-activity</b>	Measured by its ability of the immobilized protein to support the adhesion of Jurkat cells. The ED <sub>50</sub> for this effect is < 3 µg/mL.

### Properties

<b>Purity</b>	> 98 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.1 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	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 HVCR2/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  $\alpha 4 \beta 1$ .