Recombinant Human Galectin-9 protein(His Tag)

Catalog No. PKSH034185

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

| Description | |
|-----------------------------|---|
| Synonyms | LGALS9;HUATA;LGALS9 |
| Species | Human |
| Expression Host | E.coli |
| Sequence | Ala 2-Thr 323 |
| Accession | O00182-2 |
| Calculated Molecular Weight | 36.7 kDa |
| Observed molecular weight | 37 kDa |
| Tag | N-His |
| Bioactivity | 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% Tween80 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 overexpressed 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 $\alpha 4\beta 1$.