Recombinant Human, Gal-9 / Galectin-9, Animal Free & Carrier Free

Cat #: C-CYP369

Size: 5μg, 20μg, 100μg, 500μg, 1mg

Shipping: Blue Ice

Product Overview

Galectin-9 is belonging to the lectin family, that containing total 15 mammalian lectin members. Similar to other galectins, There is a carbohydrate recognition binding domain that enables Galectin-9 binding to β-galactosides specifically. Galectin-9 may be retained intracellularly or transported to the cell surface where it can be cleaved to generate a soluble form. Galectin-9 functions in effector and regulatory phases of the immune response. During inflammation, the production of Galectin-9 in vivo generates a microenvironment that limits effector T cell responses. Galectin-9 can negatively regulate the Th1 immune response by engaging TIM-3 on T cells, which leads to induction of intracellular Ca2+ influx and activation of apoptosis pathways.

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

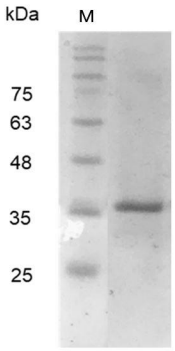
Biological Activity: Measured by its ability of the immobilized protein to support the adhesion of Jurkat cells. The ED50 for this effect is <3 μg/mL.

Endotoxin: <0.1EU per 1μg of the protein by the LAL method.

Amino acid sequence:

AFSGSQAPYLSPAVPFSGTIQGGLQDGLQITVNGTVLSSSGTRFAVNFQTGFSGNDIAFHFNPRFEDGGYVVCNTRQNGSWGPEERKTH MPFQKGMPFDLCFLVQSSDFKVMVNGILFVQYFHRVPFHRVDTISVNGSVQLSYISFQPPGVWPANPAPITQTVIHTVQSAPGQMFSTPA IPPMMYPHPAYPMPFITTILGGLYPSKSILLSGTVLPSAQRFHINLCSGNHIAFHLNPRFDENAVVRNTQIDNSWGSEERSLPRKMPFVRGQ SFSVWILCEAHCLKVAVDGQHLFEYYHRLRNLPTINRLEVGGDIQLTHVQT with polyhistidine tag at the N-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 7.4.



SDS-PAGE analysis of recombinant human Galectin-9

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.

2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H_2O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.

3. The reconstituted solution can be stored at 2-8°C for up to 1 week.

4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 μg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.