



Galectin-4, His tag, mouse recombinant (rmLGALS4-His)

Catalog No: 97606
Lot No: XXXXX
Source: *E. coli*
Synonyms: gal-4, Galectin-4, Lactose-binding lectin 4, lectin galactoside-binding soluble 4

Background

Galectin-4 is a member of the subfamily of galectins composed of two carbohydrate recognition domains having similar peptide chains. The galectins are a family of beta-galactoside-binding proteins having a role in modulating cell-cell and cell-matrix interactions, which inhibits chronic inflammations, GVHD, and allergic responses. LGALS4 expression is limited to small intestine, colon, and rectum, and it is underexpressed in colorectal cancer. LGALS4 binds as an endogenous ligand to glycosphingolipids having 3-O-sulfated Gal residues and bind as well to cholesterol-3-sulfate. LGALS4 takes part in cell adhesion. LGALS4 plays a role in crosslinking the lateral cell membranes of the surface-lining epithelial cells, thus supporting epithelial integrity against mechanical stress exerted by the bowel lumen. LGALS4 is in charge of intestinal inflammation via selective regulation of peripheral and mucosal T-cell cell cycle, in addition to cell death by apoptosis of T-cells by a pathway independent of the activation of caspases. LGALS4 blockade decreases TNF-alpha inhibitor induced T-cell death. LGALS4 decreases pro-inflammatory cytokine secretion including IL-6 & IL-17.

Description

LGALS4 mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 349 amino acids (1-326) and having a molecular mass of 31.8 kDa. LGALS4 is fused to a 23 amino acid His Tag at N-terminus and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless solution.

Formulation

The LGALS4 protein solution (0.5 mg/ml) containing 20 mM Tris-HCl buffer (pH 8.0), 0.1 M NaCl, 10% glycerol and 1 mM DTT.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

Amino Acid Sequence

MGSSHHHHHH SSSLVPRGSH MGSMAIVPAP GYQPTYNPTL PYKRPIPGGL SVGMSVYIQG MAKENMRRFH VNFAVGQDDG
ADVAFHFNPR FDGWDKVVFN TMQSGQWGKE EKKKSMPPFQK GKHFEVLVFMV MPEHYKVVVN GNSFYEYGHR LPVQMVTHLQ
VDGDLELQSI NFLGGQPAAA PYPGAMTIPA YPAGSPGYNP PQMNTLPVMT GPPVFNPRVP YVGALQGGLT VRRITIIKGY
VLPTARNFVI NFKVGSSGDI ALHLNPRIGD SVVRNSFMNG SWGAEERKVA YNPFPGPQQFF DLSIRCGMDR FKVFANGQHL
FDFSHRFQAF QMVDLTLEING DITLSYVQI

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