



Galectin-7, His tag, mouse recombinant (rmLGALS7-His)

Catalog No: 97603
Lot No: XXXXX
Source: *E. coli*
Synonyms: Galectin-7, Gal-7, HKL-14, PI7, p53-induced gene 1 protein, LGALS7, PIG1, LGALS7B, GAL7, LGALS7A

Background

Galectins are a family of animal lectins with an affinity for beta-galactosides. This family has at least 14 identified members. Galectins share similarities in the CRD (the carbohydrate recognition domain). Galectins are synthesized as cytosolic proteins. Though localized principally in the cytoplasm and lacking a classical signal peptide, galectins can also be stimulated to secretion by non-classical pathways or alternatively targeted to the nucleus. Galectins are involved in modulating cell-cell and cell-matrix interactions. Human Galectin-7 belongs to the prototypical Galectins containing a single CRD, which is initially identified in human epidermis as a monomer. The Galectin-7 expression is induced by tumor suppressor protein p53 and associated with apoptosis. Galectin-7 is a pro-apoptotic protein which functions intracellularly upstream of JNK activation and mitochondrial cytochrome c release. The correlation of Galectin-7 with the UV-induced apoptosis of keratinocytes presents a critical mechanism in the maintenance of epidermal homeostasis. Human Galectin-7 is localized in both nucleus and cytoplasm.

Description

LGALS7 mouse recombinant produced *E. coli* is a single polypeptide chain containing 159 amino acids (1-136) and having a molecular mass of 17.6 kDa. LGALS7 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 LGALS7 solution (1 mg/ml) contains 20 mM Tris-HCl buffer (pH 8.0), 0.1 M NaCl, 20% glycerol and 2 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 95.0% as determined by SDS-PAGE.

Amino Acid Sequence

MGSSHHHHHH SSSLVPRGSH MGSMSATQHK TSLPQGVRVG TVMRIRGMVP DQAGRFHVNL LCGEEQGADA ALHFNPRLDL
SEVVFNTKEQ GKWGREERGT GIPFERGQPF EVLLIATEEG FKAVVGDDEY LHFHHRMPPA RVRLVEVGGD VQLHSVKIF

Usage

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