

Human Galectin-7 / LGALS7 Protein (His Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 12000-H07E

General Information

Gene Name Synonym:

GAL7; LGALS7A

Protein Construction:

A DNA sequence encoding the human LGALS7 (NP_002298.1) (Ser2-Phe136) was expressed with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to agglutinate human red blood cells. The ED₅₀ for this effect is typically 0.2-2 µg/mL.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:

The recombinant human LGALS7 consists of 153 amino acids and predicts a molecular mass of 17.2 KDa. It migrates as an approximately 18 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

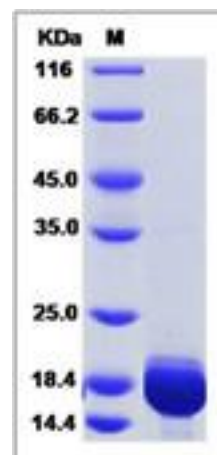
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

LGALS7, also known as Galectin-7, is a member of the galectins family. The galectins are a family of beta-galactoside-binding proteins. There are at least 14 identified members in this family. Galectins share similarities in the CRD (the carbohydrate recognition domain). They 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 implicated in modulating cell-cell and cell-matrix interactions. LGALS7 contains 1 galectin domain and is mainly expressed in stratified squamous epithelium. Galectin-7 could be involved in cell-cell and/or cell-matrix interactions necessary for normal growth control. LGALS7 is a pro-apoptotic protein that functions intracellularly upstream of JNK activation and cytochrome c release.

References

- 1.Villeneuve C, *et al.* (2011) Mitochondrial proteomic approach reveals galectin-7 as a novel BCL-2 binding protein in human cells. *Mol Biol Cell.* 22(7):999-1013.
- 2.Rondanino C, *et al.* (2011) Galectin-7 modulates the length of the primary cilia and wound repair in polarized kidney epithelial cells. *Am J Physiol Renal Physiol.* 301(3):F622-33.
- 3.Masuyer G, *et al.* (2012) Inhibition mechanism of human galectin-7 by a novel galactose-benzylphosphate inhibitor. *FEBS J.* 279(2):193-202.

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