

Active Recombinant Mouse Lgals8 Protein, His-tagged

Cat. No. Lgals8-7395M Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant mouse LGALS8 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Mouse
Source	E.coli
ProteinLength	1-316
Description	Beta-galactoside-binding lectin that acts as a sensor of membrane damage caused by infection and restricts the proliferation of infecting pathogens by targeting them for autophagy. Detects membrane rupture by binding beta-galactoside ligands located on the luminal side of the endosome membrane; these ligands becoming exposed to the cytoplasm following rupture. Restricts infection by initiating autophagy via interaction with CALCOCO2/NDP52. Required to restrict infection of bacterial invasion such as S.typhimurium. Also required to restrict infection of Picornaviridae viruses. Has a marked preference for 3'-O-sialylated and 3'-O-sulfated glycans.
Form	Liquid
Bio-activity	The ED50 for this effect is 3.9–15.63 µg/mL, measured by its ability to agglutinate human red blood cells. Biological assay: 1. Mix equal volumes of human blood and Alsever's solution (pH 7.0). (Alsever's solution: NaCl 0.42 g, Sodium citric acid 0.8 g, Citric acid 0.055 g, D-glucose 2.05 g in

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- DW100 mL).
2. Centrifuge at 15000 rpm for 10 minutes and wash four times with PBS.
 3. Dilute packed cells in a 0.5 mg/mL trypsin-EDTA solution to give 4% red cell suspension.
 4. Incubate for 1 h at 37 centigrade and wash four times with PBS.
 5. Dilute packed cells in PBS to give 4% red cell suspension.
 6. Load 50 μ L of 0.5% BSA-in-0.15 M-NaCl solution and 25 μ L of 4% Red cell-in-PBS in U shaped wells.
 7. Add 25 μ L of serial diluted Galectin protein in PBS to each well plate. (Round bottom 96 well plate).
 8. Incubate for 30 min at room temperature to observe visible agglutination.

Molecular Mass 38 kDa

AA Sequence

MGSSHHHHHSSGLVPRGSHMGSMLSLNQLNIIYNPIIPYVGTITEQLKPGSLIVIR
 GHVPKDSERFQVDFQLGNSLKPRAVDVAFHFNPRFKRSSCIVCNTLTQEKGWGWEEIT
 YDMPFRKEKSFEIVFMVLKNKFQVAVNGRHVLLYAHRISPEQIDTVGIYGKVNHSIGF
 RFSSDLQSMETSALGLTQINRENIQKPGKLQLSLPFEARLNASMGPGRTVVIKGEVN
 TNARSFNVDLVAGKTRDIALHLNPRNLNVKAFVRNSFLQDAWGEEERNITCFPFSSGM
 YFEMIIYCDVREFKVAINGVHSLEYKHRFKDLSSIDTLSVDGDIRLLDVRSW

Purity > 90 % by SDS-PAGE

Stability Shelf life: one year from despatch.

Storage Store undiluted at 2-8 centigrade for one week or (in aliquots) at -20 to -80 centigrade for longer. Avoid repeated freezing and thawing.

Concentration 0.5 mg/mL (determined by Bradford assay)

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Storage Buffer 20 mM Tris-HCl buffer (pH 8.0) containing 0.15 M NaCl, 20 % glycerol and 1 mM DTT

GENE INFORMATION

Gene Name Lgals8 lectin, galactose binding, soluble 8 [*Mus musculus* (house mouse)]

Official Symbol Lgals8

Synonyms Lgals8; lectin, galactose binding, soluble 8; Lga; Lgals-8; AI326142; D13Ert524; D13Ert524e; 1200015E08Rik; galectin-8; galectin-8L; lectin, galactose binding, soluble 5

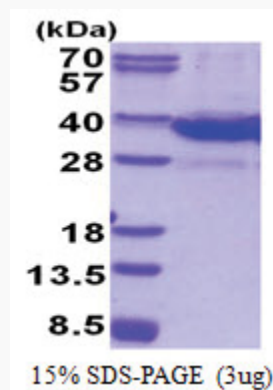
Gene ID 56048

mRNA Refseq NM_001199043

Protein Refseq NP_001185972

UniProt ID Q9JL15

SDS-PAGE



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