

Galectin 12 (GAL12) Active Protein | GAL12 active protein

Active Galectin 12 (GAL12)

CATALOG # AAA152174	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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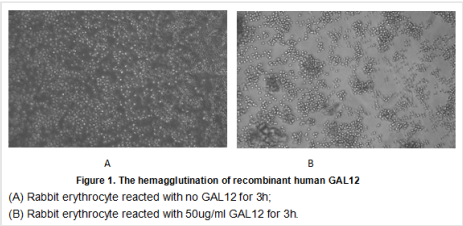
PRODUCT SYNONYMS

Galectin 12 (GAL12); Active Galectin 12 (GAL12); GAL12/Galectin 12; LGALS12; GRIP1; Lectin; Galactoside-Binding Soluble 12; Galectin-related inhibitor of proliferation; GAL12 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 97% by SDS-PAGE
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300. Freeze-dried powder
Sequence	Pro70~Leu291
Applicable Applications for GAL12 active protein	Activity Assay, Cell Culture
Species	Human
Isoelectric Point	8.7
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months Stable for 12 months if correctly stored.

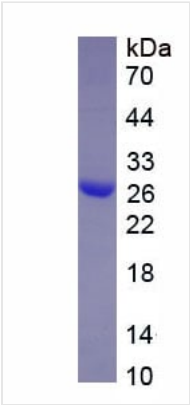
IMAGES



Bioactivity

Galectin-12 is a member of a family of mammalian lectins known as galectins. The galectins constitute a large family of carbohydrate-binding proteins that function in many systems both intracellularly and following secretion. Galectins contain either one or two carbohydrate recognition domains (CRR) which mediate recognition of N-acetyl-lactosamine-containing glycoproteins. Individual galectins differ in their tissue distribution and in their carbohydrate-binding specificities. Galectin-12 is predominantly expressed in adipose tissue and detected also in macrophages and other leukocytes. It plays an important role in cell-cell adhesion, cell-matrix interactions, macrophage activation, angiogenesis, metastasis, apoptosis. In this case, we chose rabbit erythrocyte (RaE) to assay its ability of agglutination. A general procedure for hemagglutination assay (or haemagglutination assay; HA) is as follows, two-fold dilute the recombinant Hu GAL12 with 0.9% sodium chloride injection, add 50uL a serial dilution of GAL12 to each well of a U or V-bottom shaped 96-well microtiter plate. The final well serves as a negative control with no GAL12, replace with 50uL 0.9% sodium chloride injection. Then add 50uL 1% rabbit erythrocyte to each well and mixed gently. The plate is incubated for 3 hours at room temperature. The results are shown in Figure 1. It was obvious that the minimal effective concentration of GAL12 is 0.781 ug/mL.

SDS-PAGE
SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for GAL12 active protein	Metabolic pathway; Active proteins/AP
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NCBI AND UNIPROT INFORMATION

NCBI GI #	216547832
NCBI GeneID	85329
NCBI Accession #	NP_001136010.1
NCBI GenBank Nucleotide #	NM_001142538.1
UniProt Accession #	Q96DT0; Q96DS9; Q96PR9; Q9H258; Q9H259; Q9NZ02; B2R9N2
Molecular Weight	37,542 Da
NCBI Official Full Name	galectin-12 isoform 5
NCBI Official Synonym Full Names	lectin, galactoside-binding, soluble, 12
NCBI Official Symbol	LGALS12
NCBI Official Synonym Symbols	GAL12; GRIP1
NCBI Protein Information	galectin-12; galectin 12; galectin-related inhibitor of proliferation
UniProt Protein Name	Galectin-12
UniProt Gene Name	LGALS12
UniProt Synonym Gene Names	GRIP1; Gal-12
UniProt Entry Name	LEG12_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

