

Galectin-1/LGALS1, Human, Recombinant

Cat. No. : PCK285

General Information

Synonyms	Beta-galactoside-binding lectin L-14-I; Galaptin; 14 kDa lectin; S-LAC lectin-1
Species	Human
Expression host	E.coli
Sequence	ACGLVASNLNLKPGECLEVRGEVAPDAKSFVLNLGKDSNNLCLHFNPRFNAHGDANTIVCNSK DGGAWGTEQREAVFPFQPGSVAEVCITFDQANLTVKLPDGYEFKFPNRLNLEAINYMAADGDF KIKCVAFD with polyhistidine tag at the N-terminus.
Accession	P09382.2
Tag	His-tag at the N-terminus
Mol mass	15.5 kDa
Expiration date	12 months
Bio activity	Measured by its ability to agglutinate human red blood cells. The ED50 for this effect is < 2 µg/mL.

Product feature

Purity	> 98% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/µg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 µm filtered solution containing 1 × PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 µg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

The galectin-1 protein is 135 amino acids in length and highly conserved across species. It can be found in the nucleus, the cytoplasm, the cell surface and in the extracellular space. Galectins, in general, lack a traditional signal sequence but are still secreted across the plasma membrane. Although galectins in general, and Gal-1 in particular, were first described as lectins that bind β-galactosides, it is now clear from the literature that as well as being a lectin, Gal-1 is also engaged in many protein-protein interactions. Gal-1 plays a number of crucial roles in neuronal cell differentiation and survival in both the central and the peripheral nervous systems, and the establishment and maintenance of T-cell tolerance and homeostasis in vivo.

SDS-PAGE

