

## 32-1227: LGALS7 Recombinant Protein

**Alternative Name :** Galectin-7, Gal-7, HKL-14, PI7, p53-induced gene 1 protein, LGALS7, PIG1, LGALS7B, GAL7, LGALS7A.

### Description

Source : Escherichia Coli. Galectin-7 Human Recombinant produced in E.Coli is a single, non-glycosylated, Polypeptide chain containing 135 amino acids and having a molecular mass of 15kDa. The LGALS7 is purified by proprietary chromatographic techniques. 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.

### Product Info

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	LGALS7 was lyophilized from a concentrated (1 mg/ml) solution in 20mM PBS, pH 7.4.
<b>Storage condition :</b>	Lyophilized LGALS7 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Galectin-7 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.
<b>Amino Acid :</b>	The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Asn-Val-Pro-His.

### Application Note

It is recommended to reconstitute the lyophilized Galectin-7 in sterile 18M-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. The ED<sub>50</sub> of Galectin-7 as determined by hemagglutination test is 0.75~3 µg/ml.

