## **Elabscience**®

### Recombinant Human LGALS7 Protein(Trx Tag)

### Catalog Number: PDEH100555

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description    |   |  |  |
|----------------|---|--|--|
| Species        | Human   |  |  |
| Source         | E.coli-derived Human LGALS7 protein Ser2-Phe136, with an N-terminal Trx   |  |  |
| Calculated MW  | 34.8 kDa  |  |  |
| Observed MW    | 34.8 kDa  |  |  |
| Accession      | P47929  |  |  |
| Bio-activity   | Not validated for activity  |  |  |
| Properties     |   |  |  |
| Purity         | > 90% as determined by reducing SDS-PAGE.   |  |  |
| Endotoxin      | < 10 EU/mg of the protein as determined by the LAL method   |  |  |
| Storage        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80  |  |  |
|                | °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at $<$ -20°C for 3 months. |  |  |
| Shipping       | This product is provided as lyophilized powder which is shipped with ice packs.   |  |  |
| Formulation    | Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%  |  |  |
|                | Mannitol.   |  |  |
| Reconstitution | It is recommended that sterile water be added to the vial to prepare a stock solution of  |  |  |
|                | 0.5 mg/mL. Concentration is measured by UV-Vis.   |  |  |

Data

| kDa | М | R |
|-----|---|---|
| 80  |   |   |
| 60  | - |   |
| 40  |   |   |
|     |   | - |
| 30  | - |   |
| 20  | - |   |
|     |   |   |

SDS-PAGE analysis of Human LGALS7 proteins, 2 µg/lane of Recombinant Human LGALS7 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 34.8 KD

#### Background

# **Elabscience**®

LGALS7, also known as Galectin-7, is a member of the galectins family. The galectins are a family of beta-galactosidebinding proteins. There are at least 14 identified members of 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 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.