

## Datasheet for ABIN1672792

### Galectin 3 ELISA Kit

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#### 1 Image

#### Overview

Quantity:	96 tests
Target:	Galectin 3 (LGALS3)
Binding Specificity:	AA 2-250
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

#### Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Galectin-3/LGALS3
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: A2-I250
Specificity:	Expression system for standard: E.coli Immunogen sequence: A2-I250
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

## Target Details

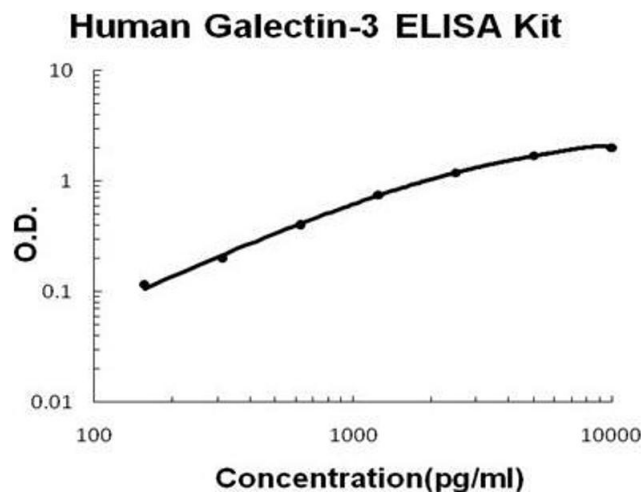
Target:	Galectin 3 (LGALS3)
Alternative Name:	LGALS3 ( <a href="#">LGALS3 Products</a> )
Target Type:	Chemical
Background:	<p>Protein Function: Galactose-specific lectin which binds IgE. May mediate with the alpha-3, beta-1 integrin the stimulation by CSPG4 of endothelial cells migration. Together with DMBT1, required for terminal differentiation of columnar epithelial cells during early embryogenesis (By similarity). In the nucleus: acts as a pre-mRNA splicing factor. Involved in acute inflammatory responses including neutrophil activation and adhesion, chemoattraction of monocytes macrophages, opsonization of apoptotic neutrophils, and activation of mast cells. .</p> <p>Background: Galectin-3(GAL3), also known as LGALS3, MAC2 or GALBP, is a member of the lectin family, of which 14 mammalian galectins have been identified. Galectin-3 is encoded by a single gene, LGALS3, located on chromosome 14, locus q21â€”q22. It is expressed in the nucleus, cytoplasm, mitochondrion, cell surface, and extracellular space. Studies have also shown that the expression of galectin-3 is implicated in a variety of processes associated with heart failure, including myofibroblast proliferation, fibrogenesis, tissue repair, inflammation, and Ventricular remodeling. Galectin-3 is expressed in various tissues and organs, but is significantly absent in normal hepatocytes.</p> <p>Synonyms: Galectin-3, Gal-3, 35 kDa lectin, Carbohydrate-binding protein 35, CBP 35, Galactose-specific lectin 3, Galactoside-binding protein, GALBP, IgE-binding protein, L-31, Laminin-binding protein, Lectin L-29, Mac-2 antigen, LGALS3, MAC2,</p> <p>Full Gene Name: Galectin-3</p> <p>Cellular Localisation: Cytoplasm. Nucleus. Secreted. Secreted by a non-classical secretory pathway and associates with the cell surface.</p>
Gene ID:	3958
UniProt:	<a href="#">P17931</a>
Pathways:	<a href="#">RTK Signaling</a>

## Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Contains 1 galectin domain. Tissue Specificity: A major expression is found in the colonic epithelium. It is also abundant in the activated macrophages. Expressed in fetal membranes. .
Plate:	Pre-coated
Protocol:	human Galectin-3 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Galectin-3 has been precoated onto 96-well plates. Standards(E.coli, A2-I250) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Galectin-3 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Galectin-3 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human Galectin-3 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human Galectin-3 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none"><li>• Sample 1: n=16, Mean(pg/ml): 624, Standard deviation: 27.46, CV(%): 4.4</li><li>• Sample 2: n=16, Mean(pg/ml): 3138, Standard deviation: 163.2, CV(%): 5.2</li><li>• Sample 3: n=16, Mean(pg/ml): 6618, Standard deviation: 271.3, CV(%): 4.1,</li><li>• Sample 1: n=24, Mean(pg/ml): 615, Standard deviation: 54.12, CV(%): 8.8</li><li>• Sample 2: n=24, Mean(pg/ml): 3449, Standard deviation: 279.4, CV(%): 8.1</li><li>• Sample 3: n=24, Mean(pg/ml): 6296, Standard deviation: 453.3, CV(%): 7.2</li></ul>
Restrictions:	For Research Use only

## Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C, 4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles



ELISA

**Image 1.** Human Galectin-3/LGALS3 PicoKine ELISA Kit standard curve