

Mouse Monoclonal Antibody to LGALS1 Purified Mouse Monoclonal Antibody Catalog # A02356a

## Specification

## Mouse Monoclonal Antibody to LGALS1 - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  WB, IHC, FC, E P09382 Human Mouse Monoclonal Mouse IgG1 14.7kDa KDa

The galectins are a family of beta-galactoside-binding proteins implicated in modulating cell-cell and cell-matrix interactions. This gene product may act as an autocrine negative growth factor that regulates cell proliferation.;

Immunogen Purified recombinant fragment of human LGALS1 (AA: 1-135) expressed in E. Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

Application Note ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; FCM: 1/200 - 1/400

### Mouse Monoclonal Antibody to LGALS1 - Additional Information

Gene ID 3956

Other Names GBP; GAL1

**Dilution** WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Monoclonal Antibody to LGALS1 is for research use only and not for use in diagnostic or therapeutic procedures.



## Mouse Monoclonal Antibody to LGALS1 - Protein Information

### Name LGALS1 (HGNC:6561)

### Function

Lectin that binds beta-galactoside and a wide array of complex carbohydrates. Plays a role in regulating apoptosis, cell proliferation and cell differentiation. Inhibits CD45 protein phosphatase activity and therefore the dephosphorylation of Lyn kinase. Strong inducer of T-cell apoptosis. Plays a negative role in Th17 cell differentiation via activation of the receptor CD69 (PubMed:<a href="http://www.uniprot.org/citations/24752896" target="\_blank">24752896</a>).

#### **Cellular Location**

Secreted, extracellular space, extracellular matrix. Cytoplasm. Secreted Note=Can be secreted; the secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum- Golgi intermediate compartment) followed by vesicle entry and secretion.

#### **Tissue Location**

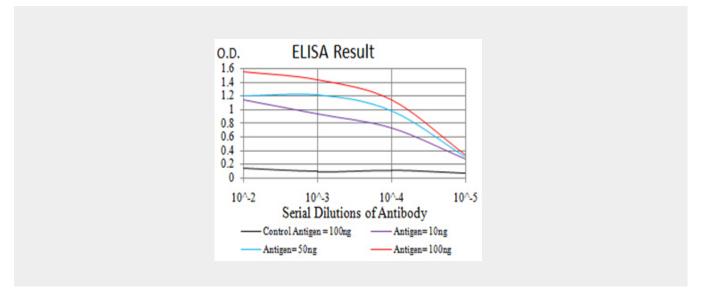
Expressed in placenta, maternal decidua and fetal membranes. Within placenta, expressed in trophoblasts, stromal cells, villous endothelium, syncytiotrophoblast apical membrane and villous stroma. Within fetal membranes, expressed in amnion, chorioamniotic mesenchyma and chorion (at protein level). Expressed in cardiac, smooth, and skeletal muscle, neurons, thymus, kidney and hematopoietic cells.

## Mouse Monoclonal Antibody to LGALS1 - Protocols

Provided below are standard protocols that you may find useful for product applications.

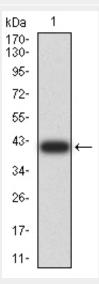
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Mouse Monoclonal Antibody to LGALS1 - Images

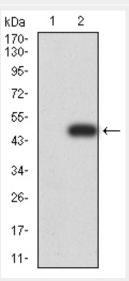




Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

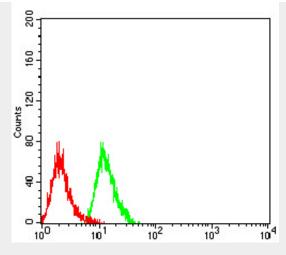


Western blot analysis using LGALS1 mAb against human LGALS1 (AA: 1-135) recombinant protein. (Expected MW is 40.7 kDa)

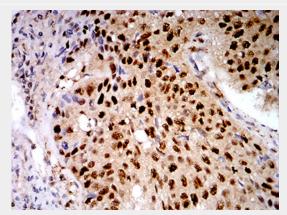


Western blot analysis using LGALS1 mAb against HEK293 (1) and LGALS1 (AA: 1-135)-hlgGFc transfected HEK293 (2) cell lysate.

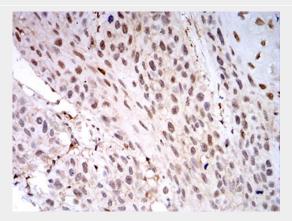




Flow cytometric analysis of Hela cells using LGALS1 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded lung cancer tissues using LGALS1 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using LGALS1 mouse mAb with DAB staining.

# Mouse Monoclonal Antibody to LGALS1 - References

1.Cancer Sci. 2014 Nov;105(11):1402-10. ; 2.Lung Cancer. 2014 Apr;84(1):73-8. ;