abcam

ab95679

# Biotin Anti-Galectin 3 antibody [M3/38]

Anti-Galectin 3 antibody [M3/38] conjugated to Biotin - suitable for flow cytometry, and reacts with mouse, human samples. Clone [M3/38] is a rat monoclonal antibody cited in 16 publications.

## Key facts

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| **Isotype** | IgG2a |
| **Host species** | Rat |
| **Conjugation** | Biotin |
| **Storage buffer** | pH: 7.2 Preservative: 0.09% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Native Full Length Protein corresponding to Mouse Lgals3. Database link P16110 |
| **Clone number** | M3/38 |
| **Purification technique** | Affinity purification Protein G |
| **Light chain type** | kappa |
| **Concentration** | 0.5 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

**Tested**

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|---|---|
| **Species** | Mouse |

| | |
|---|---|
| **Dilution info** | 0.25 µg for $10^5$ Cells |
| **Notes** | ab95679 can be used at 0.25 µg/per test. A test is defined as the amount (µg)/test of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from $10^5$ to $10^8$ cells/test. ab18445 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody. |

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 0.25 µg for $10^5$ Cells |
| **Notes** | ab95679 can be used at 0.25 µg/per test. A test is defined as the amount (µg)/test of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from $10^5$ to $10^8$ cells/test. ab18445 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody. |

## Target data

See full target information Lgals3

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|---|---|
| **Function** | Galactose-specific lectin which binds IgE. May mediate with the alpha-3, beta-1 integrin the stimulation by CSPG4 of endothelial cells migration (PubMed:15181153). Together with DMBT1, required for terminal differentiation of columnar epithelial cells during early embryogenesis. 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. Together with TRIM16, coordinates the recognition of membrane damage with mobilization of the core autophagy regulators ATG16L1 and BECN1 in response to damaged endomembranes (By similarity). When secreted, interacts with NK cell-activating receptor NCR3/NKp30 acting as an inhibitory ligand which antagonizes NK cell attack (By similarity). |

## Storage

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| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Storage information** | Avoid freeze / thaw cycle |

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

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|---|---|
| **Activity summary** | Galectin-3 also known as LGALS3 is a protein belonging to the galectin family which are beta-galactoside-binding lectins. This protein has a molecular weight of about 30 kDa. It shows expression in various tissues including the heart liver and gastrointestinal tract. Galectin-3 plays a mechanical role in cell-cell adhesion cell-matrix interactions and modulating immune responses. Researchers often use galectin-3 ELISA kits to quantify its presence in different biological samples. |
| **Biological function summary** | Galectin-3 participates in cell growth regulation apoptosis and immune system modulation. Galectin-3 does not typically integrate into larger molecular complexes but it interacts with a variety of cell surface and extracellular matrix molecules. Its function influences processes like cell differentiation and angiogenesis where it can act as a regulator leveraging its ability to bind glycans on cell surfaces and matrix components. |
| **Pathways** | Galectin-3 contributes to the regulation of pathways such as the MAPK signaling pathway and the Wnt signaling pathway. In the MAPK pathway it influences cell proliferation and survival. Galectin-3 interacts with proteins like β-catenin in the Wnt pathway assisting in transcriptional regulation and cell fate determination. These pathways are vital for maintaining cellular homeostasis and responding to extracellular signals. |
| **Associated diseases and disorders** | Galectin-3 has a strong connection to cancer and fibrosis. Its role in cancer involves promoting tumor cell survival metastasis and angiogenesis where it interacts with proteins like integrins to facilitate tumor progression. In fibrosis galectin-3 contributes to fibrotic tissue formation especially in conditions like idiopathic pulmonary fibrosis and cardiac fibrosis often associated with proteins such as TGF-β. Understanding these interactions helps in developing therapeutic strategies targeting galectin-3 in these diseases. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

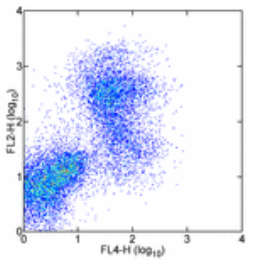
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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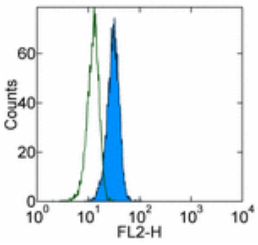
## 2 product images




### Flow Cytometry - Biotin Anti-Galectin 3 antibody [M3/38] (ab95679)

Galectin 3 Flow Cytometry staining using rat Anti-Galectin 3 antibody

ab95679 at 0.125µg dilution staining the monocyte population in normal human peripheral blood cells by Flow Cytometry followed by Streptavidin PE.




### Flow Cytometry - Biotin Anti-Galectin 3 antibody [M3/38] (ab95679)

Galectin 3 Flow Cytometry staining using rat Anti-Galectin 3 antibody

ab95679 at 0.125µg dilution staining Galectin 3 in C57BL/6 mouse bone marrow cells by Flow Cytometry (shown in blue) followed by Streptavidin PE.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.