

## PE anti-mouse Galectin-9 Antibody

<b>Catalog# / Size</b>	137903 / 50 µg 137904 / 200 µg
<b>Clone</b>	108A2
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Lgals9, Gal-9, Ecalectin
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	Galectin-9 is a mammalian lectin with a molecular weight of 40 kD that has two conserved carbohydrate recognition domains (CRDs) and forms homodimers. It recognizes N-acetyllactosamine (Galbeta1-4GlcNAc) and T-antigen (Galbeta1-3GalNAc); Tim-3 has been reported as its ligand. Galectin-9 is expressed by lymphocytes, dendritic cells, granulocytes, eosinophils, astrocytes, endothelial cells, fibroblasts and thymus epithelial cells. It may be retained intracellularly or be transported to the cell surface where it is cleaved, thereby generating a soluble form. Galectin-9 is involved in events such as cell aggregation, cell adhesion, chemotaxis and apoptosis. Importantly for the regulation of the immune response, Galectin-9 induces regulatory T cells and suppresses Th1 and Th17 responses.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Full length recombinant mouse Galectin-9 (M-type)
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	Clone 108A2 recognizes the linker peptide of mouse Galectin-9; it does not cross-react with stable Galectin-9 (which is biologically active, genetically engineered, linker-less Galectin-9) <sup>3</sup> . Additional reported applications (for the relevant formats) include: sandwich ELISA as capture antibody <sup>1</sup> and immunohistochemical staining of paraffin <sup>2</sup> embedded tissue sections.
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Tsuboi Y, <i>et al.</i> 2007. <i>Clin. Immunol.</i> 124:221. (ELISA)</li> <li>2. Personal communication. (IHC-Paraffin)</li> <li>3. Oomizu S, <i>et al.</i> 2012. <i>PLoS One.</i> 7:e48574. <a href="#">PubMed</a></li> <li>4. Madireddi S, <i>et al.</i> 2014. <i>J Exp Med.</i> 211:1433. <a href="#">PubMed</a></li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>1. Madireddi S, <i>et al.</i> 2014. <i>J Exp Med.</i> 211:1433. <a href="#">PubMed</a></li> <li>2. Shan M <i>et al.</i> 2018. <i>Immunity.</i> 49(4):709-724. <a href="#">PubMed</a></li> <li>3. Knox T, <i>et al.</i> 2019. <i>Sci Rep.</i> 9:6136. <a href="#">PubMed</a></li> </ol>

4. Cao A, *et al.* 2018. *Nat Commun.* 9:3288. [PubMed](#)
5. Smith LK, *et al.* 2021. *Elife.* 10:. [PubMed](#)

**RRID** AB\_10568785 (BioLegend Cat. No. 137903)  
AB\_10567119 (BioLegend Cat. No. 137904)

## Antigen Details

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<b>Structure</b>	Homodimer, each chain is a 343 aa protein of 40 kD that has two conserved carbohydrate recognition domains (CRDs)
<b>Distribution</b>	Lymphocytes, dendritic cells, neutrophils, eosinophils, astrocytes, endothelial cells, fibroblasts, thymus stromal/epithelial cells
<b>Function</b>	Cell aggregation, cell adhesion, chemotaxis, apoptosis, suppression of Th1 and Th17 responses, induction of regulatory T cells
<b>Ligand/Receptor</b>	Tim-3
<b>Cell Type</b>	Astrocytes, Dendritic cells, Endothelial cells, Eosinophils, Epithelial cells, Fibroblasts, Lymphocytes, Neutrophils, Tregs
<b>Biology Area</b>	Apoptosis/Tumor Suppressors/Cell Death, Cell Adhesion, Cell Biology, Cell Motility/Cytoskeleton/Structure, Immunology
<b>Molecular Family</b>	Adhesion Molecules, Immune Checkpoint Receptors
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Klibi J, <i>et al.</i> 2009. <i>Blood</i> 113:1957.</li><li>2. Seki M, <i>et al.</i> 2008. <i>Clin. Immunol.</i> 127:78.</li><li>3. Tsuboi Y, <i>et al.</i> 2007. <i>Clin. Immunol.</i> 124:221.</li><li>4. Zhu C, <i>et al.</i> 2005. <i>Nat. Immunol.</i> 6:1245.</li><li>5. Dunphy JL, <i>et al.</i> 2002. <i>J. Biol. Chem.</i> 277:14916.</li></ol>
<b>Gene ID</b>	<a href="#">16859</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

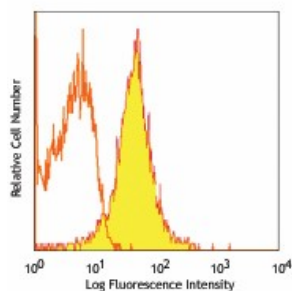
## Other Formats

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Purified anti-mouse Galectin-9, PE anti-mouse Galectin-9, Alexa Fluor® 594 anti-mouse Galectin-9, Alexa Fluor® 488 anti-mouse Galectin-9, PE/Cyanine7 anti-mouse Galectin-9, APC anti-mouse Galectin-9, Alexa Fluor® 647 anti-mouse Galectin-9

## Product Data

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C57BL/6 thymocytes stained with 108A2 PE

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