Brilliant Violet 421™ anti-mouse Galectin-9 Antibody

Catalog# / Size	136119 / 50 µg
Clone	RG9-35
Regulatory Status	RUO
Other Names	Lgals9, Gal-9, Ecalectin
Isotype	Rat IgG2a, κ
Description	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 transported to the cell surface whereby cleavage generates a soluble form. Galectin-9 is involved in events such as cell aggregation, adhesion, chemotaxis, and apoptosis, and is important for the regulation of the immune response. Galectin-9 induces regulatory T cells, and suppresses Th1 and Th17 responses.

Product Details

Isotype Control	Brilliant Violet 421™ Rat IgG2a, κ Isotype Ctrl
Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Recombinant mouse galectin-9
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
Concentration	0.2 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd. Learn more about Brilliant Violet™. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.
Excitation Laser	Violet Laser (405 nm)

Application References **(PubMed link indicates BioLegend citation)**	1. Fukushima A, *et al.* 2008. *Int. Arch. Allergy Immunol.* 146:36. (FA) 2. Hou H, *et al.* 2014. *PLoS One.* 9:110585. PubMed
RRID	AB_3683159 (BioLegend Cat. No. 136119)

Antigen Details

Structure	Homodimer, each chain is a 343 aa protein of 40 kD that has two conserved carbohydrate recognition domains (CRDs)
Distribution	Lymphocytes, dendritic cells, neutrophils, eosinophils, astrocytes, endothelial cells, fibroblasts, thymus stromal/epithelial cells
Function	Cell aggregation, cell adhesion, chemotaxis, apoptosis, suppression of Th1 and Th17 responses, induction of regulatory T cells
Ligand/Receptor	Tim-3
Bioactivity	Chemotaxis, apoptosis, cell adhesion
Cell Type	Astrocytes, Dendritic cells, Endothelial cells, Eosinophils, Epithelial cells, Fibroblasts, Lymphocytes, Neutrophils, Tregs
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Adhesion, Cell Biology, Cell Motility/Cytoskeleton/Structure, Immunology
Molecular Family	Adhesion Molecules, Immune Checkpoint Receptors
Antigen References	1. Klibi J, *et al.* 2009. *Blood* 113:1957 2. Seki M, *et al.* 2008. *Clin Immunol* 127:78 3. Tsuboi Y, *et al.* 2007. *Clin Immunol* 124:221 4. Zhu C, *et al.* 2005. *Nat Immunol* 6:1245 5. Dunphy JL, *et al.* 2002. *J. Biol. Chem.* 277:14916
Gene ID	16859

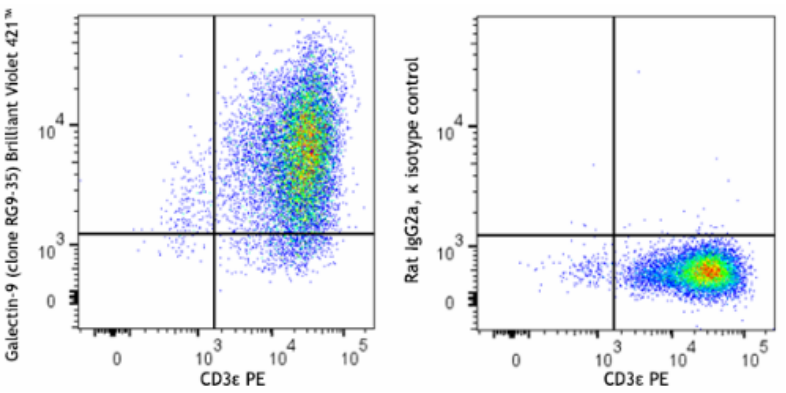
Related Protocols

- Intracellular Flow Cytometry Staining Protocol

Other Formats

PE anti-mouse Galectin-9, APC anti-mouse Galectin-9, PerCP/Cyanine5.5 anti-mouse Galectin-9, PE/Cyanine7 anti-mouse Galectin-9, Ultra-LEAF™ Purified anti-mouse Galectin-9, TotalSeq™-B1288 anti-mouse Galectin-9, Brilliant Violet 421™ anti-mouse Galectin-9, TotalSeq™-C1288 anti-mouse Galectin-9 Antibody

Product Data



C57BL/6 mouse thymocytes were surface stained with anti-mouse CD3ε (clone 145-2C11) PE. Cell were then fixed with Fixation Buffer (Cat. No. 420801), permeabilized with Intracellular Staining Permeabilization Wash Buffer (Cat. No. 421002) and intracellularly stained with anti-mouse Galectin-9 (clone RG9-35) Brilliant Violet 421™ or rat IgG2a, κ Brilliant Violet 421™ isotype control.

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