

## Brilliant Violet 421™ anti-mouse Allergin-1 Antibody

<b>Catalog# / Size</b>	141809 / 50 µg
<b>Clone</b>	TX83
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Allergy inhibitory receptor 1, mast cell Ag-32, MCA-32, Milr1
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	Allergin-1, also known as mast cell Ag-32, is a 60 kD single pass transmembrane protein. It contains one Ig-like C2-type (immunoglobulin-like) domain in the extracellular region and one immunoreceptor tyrosine-based inhibitory motif (ITIM)-like domain in the cytoplasmic region. Allergin-1 is expressed on mast cells, dendritic cells, and macrophages as well as at low levels on neutrophils. After tyrosine phosphorylation, allergin-1 recruits PTPN6, PTPN11, and INPP5D, which results in a diminution of IgE-mediated degranulation in mast cells. No ligands have been identified for this molecule.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Transfected cells expressing allergin-1-Flag
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ 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>	<p>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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>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.</p> <p><a href="#">Learn more about Brilliant Violet™.</a></p> <p>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.</p>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Inhibits FcεRI-mediated degranulation in bone marrow-derived cultured mast cells <sup>1</sup> . Additional reported applications (for the relevant formats) include: blocking <sup>1</sup> .

## Application References

1. Hitomi K, *et al.* 2010. *Nat. Immunol.* 11:601. (Block)

(PubMed link indicates  
BioLegend citation)

RRID

AB\_3674992 (BioLegend Cat. No. 141809)

## Antigen Details

<b>Structure</b>	Single pass transmembrane protein of 60 kD; contains one Ig-like C2-like domain and one ITIM-like domain
<b>Distribution</b>	Mast cells, dendritic cells, macrophages, neutrophils
<b>Function</b>	Inhibits IgE-mediated degranulation of mast cells
<b>Interaction</b>	PTPN6, PTPN11 and INPP5D
<b>Cell Type</b>	Dendritic cells, Macrophages, Mast cells, Neutrophils
<b>Biology Area</b>	Cell Biology, Immunology, Signal Transduction
<b>Antigen References</b>	1. Hitomi K, <i>et al.</i> 2010. <i>Nat. Immunol.</i> 11:601. 2. Pirozzi G, <i>et al.</i> 1995. <i>J. Immunol.</i> 155:5811.
<b>Gene ID</b>	<a href="#">380732</a>

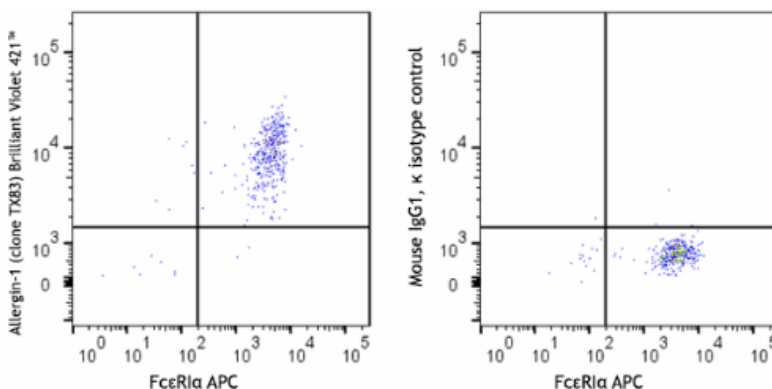
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

PE anti-mouse Allergin-1, Brilliant Violet 421™ anti-mouse Allergin-1

## Product Data



C57BL/6 mouse peritoneal cavity cells were stained with anti-mouse c-kit (clone ACK2) Brilliant Violet 785™, anti-mouse FcεR1α (clone MAR-1) APC and with anti-mouse Allergin-1 (clone TX83) Brilliant Violet 421™ (left) or mouse IgG1, κ Brilliant Violet 421™ isotype control (right). Data shown is gated on the c-kit<sup>+</sup> population.

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