

## Brilliant Violet 421™ anti-mouse P2RY12 Antibody

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| <b>Catalog# / Size</b>   | 848027 / 50 µg                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Clone</b>             | S16007D                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Regulatory Status</b> | RUO                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Other Names</b>       | P2Y12, ADPG-R, BDPLT8, HORK3, P2T(AC), P2Y(12)R, P2Y(AC), P2Y(ADP), P2Y(cyc), P2Y12P2Y12 platelet ADP receptor, purinergic receptor P2RY12, purinergic receptor P2Y, G-protein coupled, 12                                                                                                                                                                                      |
| <b>Isotype</b>           | Rat IgG2b, κ                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Description</b>       | Purinergic Receptor P2Y (P2RY12) is a receptor for ADP and ATP coupled to G-proteins that inhibit the adenylyl cyclase second messenger system. P2RY12 is not activated by UDP and UTP. Required for normal platelet aggregation and blood coagulation. P2RY12 is a highly selective marker for microglia that specifically distinguishes these cells from other myeloid cells. |

### Product Details

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| <b>Verified Reactivity</b>    | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Antibody Type</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Host Species</b>           | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen</b>              | Mouse P2RY12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <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 ≤ 1.0 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>RRID</b>                   | AB_3717217 (BioLegend Cat. No. 848027)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Antigen Details

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|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Structure</b>          | P2RY12 is a 347 amino acid protein with a molecular mass of 39.8 kD.                                                                                  |
| <b>Distribution</b>       | Tissue distribution: platelets, brain (microglia), lung, appendix, pituitary and adrenal glands.<br>Cellular distribution: cell membrane and cytosol. |
| <b>Function</b>           | G-protein coupled receptor that inhibits the adenylyl cyclase second messenger system.                                                                |
| <b>Ligand/Receptor</b>    | ADP and ATP                                                                                                                                           |
| <b>Cell Type</b>          | Microglia, Platelets                                                                                                                                  |
| <b>Biology Area</b>       | Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers                                                                    |
| <b>Molecular Family</b>   | GPCR, Purinergic Receptors                                                                                                                            |
| <b>Antigen References</b> | 1. Orr AG, <i>et al.</i> 2009. <i>Nat. Neurosci.</i> 12(7):872-8.                                                                                     |
| <b>Gene ID</b>            | <a href="#">70839</a>                                                                                                                                 |

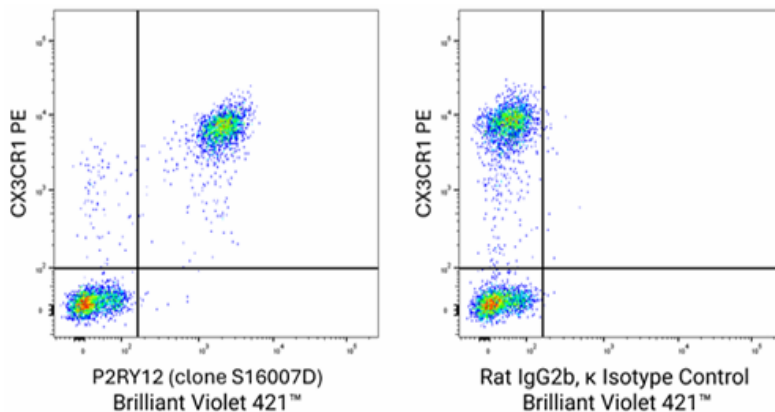
## Related Protocols

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

## Other Formats

APC/Fire™ 810 anti-mouse P2RY12, Alexa Fluor® 488 anti-mouse P2RY12, Alexa Fluor® 647 anti-mouse P2RY12, TotalSeq™-B0415 anti-mouse P2RY12, APC/Cyanine7 anti-mouse P2RY12, Purified anti-mouse P2RY12, PE anti-mouse P2RY12, APC anti-mouse P2RY12, PE/Cyanine7 anti-mouse P2RY12, TotalSeq™-C0415 anti-mouse P2RY12, Biotin anti-mouse P2RY12, TotalSeq™-A0415 anti-mouse P2RY12, Spark YG™ 570 anti-mouse P2RY12, Brilliant Violet 421™ anti-mouse P2RY12

## Product Data



C57BL/6 mouse microglia cells were enriched from collagenase-digested brain using a Percoll® gradient. Cells were stained with PE anti-mouse CX3CR1 (clone SA011F11) (Cat. No. 149006) and Brilliant Violet 421™ anti-mouse P2RY12 (clone S16007D) (left) or Brilliant Violet 421™ rat IgG2b, κ Isotype Control (right).

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