

Brilliant Violet 421™ anti-human MERTK Antibody

Catalog# / Size	367603 / 25 tests 367604 / 100 tests
Clone	590H11G1E3
Regulatory Status	RUO
Other Names	C-Mer Proto-Oncogene Tyrosine Kinase, c-mer, Proto-Oncogene C-Mer, MER Receptor Tyrosine Kinase, STK Kinase, Receptor Tyrosine Kinase MerTK, Tyrosine-Protein Kinase Mer, MER, RP38, c-Eyk, Tyro12
Isotype	Mouse IgG1, κ
Description	MERTK plays a role in the retinal pigment epithelium as a regulator of rod outer segments fragments phagocytosis. MERTK also plays a role in the inhibition of Toll-like receptor-mediated innate immune responses through the activation of STAT1. Upregulation of MERTK seems to also promote the survival of certain cancer cells, such as t(1;19)-positive acute lymphoblastic leukemias (ALL). MERTK also has a role in cellular migration, as MERTK KO macrophages demonstrate cytoskeletal disruptions that impacts its shape and directional migration. Melanoma cells express high levels of MERTK, which makes this molecule an attractive therapeutic target.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	MERTK extracellular domain/Fc fusion.
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	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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	FC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.</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>Learn more about Brilliant Violet™.</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>
Excitation Laser	Violet Laser (405 nm)
Application References	1. Rogers AE, <i>et al.</i> 2012. <i>Oncogene</i> 31:4171.
(PubMed link indicates	

BioLegend citation)

Product Citations

1. Holtzhausen A, *et al.* 2019. *Cancer Immunol Res.* 7:1672. [PubMed](#)

RRID

AB_2566396 (BioLegend Cat. No. 367603)
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Antigen Details

Structure	Transmembrane protein with two fibronectin type-III domains, two Ig-like C2-type domains, and one tyrosine kinase domain.
Distribution	Macrophages, monocytes, and dendritic cells.
Function	TLR regulation, efferocytosis, phagocytosis regulation, cell survival, and macrophage migration.
Interaction	GRB2, PLCG2, and TNK2.
Ligand/Receptor	LGALS3, TUB, TULP1, and GAS6.
Cell Type	Dendritic cells, Macrophages, Monocytes
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Cell Motility/Cytoskeleton/Structure, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers
Molecular Family	Protein Kinases/Phosphatase, Toll Like Receptors
Antigen References	<ol style="list-style-type: none">1. Schlegel J, <i>et al.</i> 2013. <i>J. Clin. Invest.</i> 123:2257.2. Chen J, <i>et al.</i> 1997. <i>Oncogene</i> 14:2033.3. Yefimova MG, <i>et al.</i> 2013. <i>Autophagy</i> 9:653.4. Zhang W, <i>et al.</i> 2013. <i>J. Med. Chem.</i> 56:9693.5. Lee YJ, <i>et al.</i> 2012. <i>J. Leuko. Biol.</i> 91:921.6. Krause S, <i>et al.</i> 2015. <i>Blood</i> 125:820.7. Tang Y, <i>et al.</i> 2015. <i>PLoS One</i> 10:e0117787.
Gene ID	10461

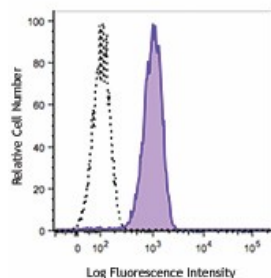
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human MERTK, Brilliant Violet 421™ anti-human MERTK, Alexa Fluor® 647 anti-human MERTK, PE anti-human MERTK, APC anti-human MERTK, PE/Cyanine7 anti-human MERTK, APC/Fire™ 750 anti-human MERTK, Biotin anti-human MERTK, TotalSeq™-A0423 anti-human MERTK, Brilliant Violet 711™ anti-human MERTK, PerCP/Cyanine5.5 anti-human MERTK, TotalSeq™-C0423 anti-human MERTK Antibody

Product Data



Human peripheral blood monocytes were stimulated and cultured with M-CSF for seven days then stained with human MERTK (clone 590H11G1E3) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ isotype control (open histogram).

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