

Brilliant Violet 605™ anti-human IL-17A Antibody

Catalog# / Size	512325 / 25 tests 512326 / 100 tests
Clone	BL168
Regulatory Status	RUO
Other Names	Interleukin IL-17A, IL-17, Cytotoxic T lymphocyte-associated antigen 8 (CTLA-8)
Isotype	Mouse IgG1, κ
Description	IL-17A is the founding member of the IL-17 family, a group of six structurally related pro-inflammatory cytokines. IL-17A, secreted by activated CD4 ⁺ Th17 cell subpopulation, elicits multiple biological activities on a variety of cells including: the induction of IL-6, IL-8, G-CSF, and PGE2 production in epithelial, endothelial or fibroblasts; the enhancement of surface expression of ICAM-1 in fibroblasts; activation of NF-κB and costimulation of T cell proliferation. Recent studies demonstrated that, in mice, activated IL-17-secreting CD4 ⁺ helper T cells (Th17 cells) mediate an autoimmune arthritis that clinically and immunologically resembles rheumatoid arthritis (RA). Human IL-17A shows 63%, 63%, and 72% amino acid sequence identity to rat IL-17A, mouse IL-17A, and a protein encoded by the ORF13 gene of herpesvirus Saimiri (HVS), respectively.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant full length human IL-17A
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 605™ 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	ICFC - Quality tested
Recommended Usage	<p>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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.</p> <p>Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ 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)

Product Citations	<ol style="list-style-type: none"> 1. Cuadrado E, <i>et al.</i> 2018. <i>Immunity</i>. 48:1046. PubMed 2. Sharan R, <i>et al.</i> 2022. <i>J Clin Invest</i>. 132:. PubMed 3. Gagne M, <i>et al.</i> 2022. <i>Cell</i>. 185:113. PubMed 4. Bending D, <i>et al.</i> 2014. <i>J Immunol</i>. 193:2699. PubMed 5. Juno JA, <i>et al.</i> 2020. <i>Nat Med</i>. 26:1428. PubMed 6. Rakshit S, <i>et al.</i> 2020. <i>Cell Rep</i>. 33:108451. PubMed 7. Hernandez DC, <i>et al.</i> 2021. <i>Immunity</i>. :. PubMed 8. Libera J, <i>et al.</i> 2020. <i>Front Immunol</i>. 11:567472. PubMed 9. King HAD, <i>et al.</i> 2021. <i>Proc Natl Acad Sci U S A</i>. 118:. PubMed 10. Sparber F, <i>et al.</i> 2019. <i>Cell Host Microbe</i>. 25:389. PubMed 11. Nobs SP, <i>et al.</i> 2017. <i>J Exp Med</i>. 214:3015. PubMed 12. Cassotta A, <i>et al.</i> 2020. <i>Eur J Immunol</i>. . PubMed 13. Dijkman K, <i>et al.</i> 2021. <i>Cell Reports Medicine</i>. 2(1):100187. PubMed
RRID	<p>AB_11218595 (BioLegend Cat. No. 512325) AB_2563887 (BioLegend Cat. No. 512326)</p>

Antigen Details

Structure	Cytokine; dimer; ~15 kD (Mammalian)
Bioactivity	Secretion of IL-6, IL-8, G-CSF, prostaglandin E2 by epithelial, endothelial or fibroblastic cells; stimulates cell migration, cord formation, and IL-6 secretion by stromal cells
Cell Sources	Activated T cell subpopulation
Cell Targets	Fibroblasts, epithelial and endothelial cells, stromal cells
Receptors	IL-17R
Cell Type	Tregs
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none"> 1. Hirota K, <i>et al.</i> 2007. <i>J. Exp. Med.</i> 204:41. 2. Furuzawa-Carballeda J, <i>et al.</i> 2007. <i>Autoimmun. Rev.</i> 6:169. 3. Witowski J, <i>et al.</i> 2007. <i>Kidney Int.</i> 71:514. 4. Gaffen SL, <i>et al.</i> 2006. <i>Vitam. Horm.</i> 74:255. 5. Hymowitz S, <i>et al.</i> 2001. <i>EMBO J.</i> 20:5332.
Gene ID	3605

Related Protocols

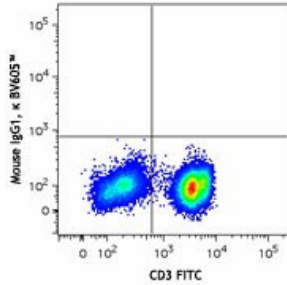
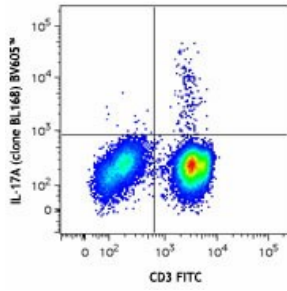
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

Brilliant Violet 421™ anti-human IL-17A, Purified anti-human IL-17A, FITC anti-human IL-17A, PE anti-human IL-17A, Alexa Fluor® 488 anti-human IL-17A, Alexa Fluor® 647 anti-human IL-17A, Pacific Blue™ anti-human IL-17A, PerCP/Cyanine5.5 anti-human IL-17A, PE/Cyanine7 anti-human IL-17A, Alexa Fluor® 700 anti-human IL-17A, APC/Cyanine7 anti-human IL-17A, Brilliant Violet 570™ anti-human IL-17A, Brilliant Violet 605™ anti-human IL-17A, Brilliant Violet 711™ anti-human IL-17A, Brilliant Violet 510™ anti-human IL-17A, APC anti-human IL-17A, Purified anti-human IL-17A (Maxpar® Ready), PE/Dazzle™ 594 anti-human IL-17A, Brilliant Violet 785™ anti-human IL-17A

Product Data



PMA + ionomycin-stimulated (6 hours) human peripheral blood lymphocytes (in the presence of monensin) were stained with CD3 FITC, fixed, permeabilized and then stained with IL-17A (clone BL168) Brilliant Violet 605™ (top) or mouse IgG1, κ Brilliant Violet 605™ isotype control (bottom).

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
 Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587