Brilliant Violet 421™ anti-human CD178 (Fas-L) Antibody

Catalog# / Size	306411 / 25 tests 306412 / 100 tests
Clone	NOK-1
Regulatory Status	RUO
Workshop	VII 70322
Other Names	Fas Ligand (FasL), CD95L, TNFSF6, Fas-L
Isotype	Mouse IgG1, κ
Description	CD178 is a 38-42 kD type II glycoprotein also known as Fas ligand and CD95L. CD178 belongs to the TNF superfamily and is expressed on activated T lymphocytes, NK cells, monocytes, and granulocytes. CD178 is also expressed on parenchymal cells of the retina and cornea, retinal pigment epithelial cells, and testis. The extracellular region of FasL can be cleaved by matrix metalloproteinases (MMPs) to give rise to a 26 kD soluble protein. CD178 binds to CD95, a member of the TNFR superfamily, to induce apoptosis. CD95/CD95L interactions play an important role in the maintenance of peripheral tolerance and survival.

Product Details

Verified Reactivity	Human
Reported Reactivity	Baboon
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	L5178Y mouse T lymphoma cells expressing recombinant human FasL
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	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. 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 Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation[1,2], immunofluorescence microscopy[3], immunocytochemistry[2], blocking of Fas induced apoptosis[1], and Western blotting[11]. Fas Ligand is expressed at low density on activated cells. For most successful

	immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 306407) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated antibody (Cat. No. 306404) or biotinylated anti-mouse IgG second step (Cat. No. 405303), followed by SAv-PE (Cat. No. 405204)). In addition, applying matrix metalloproteinases (MMPS) inhibitor in the cell culture system will increase the FasL staining intensity. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 306415 and 306416).
Application References **(PubMed link indicates BioLegend citation)**	1. Kayagaki N, *et al.* 1995. *J. Exp. Med.* 182:1777. 2. Herr I, *et al.* 2000. *Cell Death Differ.* 7:129. (WB) 3. Bossi G, et al. 1999. Nature Medicine 5:90. 4. Andreola G, *et al.* 2002. *J. Exp. Med.* 195:1303. 5. Strauss L, *et al.* 2009. *J. Immunol.* 182:1469. PubMed 6. Li JH, *et al.* 2009. *Am J. Pathol.* 175:1124. PubMed 7. Zhao Q, *et al.* 2011. *Fitoterapia.* 82:735. PubMed 8. Kruger K, *et al.* 2011. *J. Appl. Physiol.* 110:1226. PubMed 9. Qin G, *et al.* 2012. *J. Infect. Dis.* PubMed 10. Khalid M, *et al.* 2012. *J. Virol.* 86:4906. PubMed 11. Qin G, *et al.* 2012. *J. Infect. Dis.* 205:1646. PubMed 12. Shrestha B, *et al.* 2012. *J. Virol.* 86:8937. PubMed 13. Mooren FC, *et al.* 2012. *J. Appl. Physiol.*113:1082. PubMed 14. Robinet P, *et al.* 2014. *J Immunol.* 192:5332. PubMed 15. Wang Y, *et al.* 2014. *J Endocrinol.* 222:151. PubMed
RRID	AB_2716104 (BioLegend Cat. No. 306411) AB_2716105 (BioLegend Cat. No. 306412)

Antigen Details

Structure	TNF superfamily, type II glycoprotein, 38-42 kD, 26 kD soluble form
Distribution	Activated T cells, NK cells, testis, eye, neutrophils, Clara type II cells
Function	Apoptosis, immune privilege
Ligand/Receptor	CD95
Cell Type	Neutrophils, NK cells, T cells
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Immunology, Neuroscience
Molecular Family	CD Molecules
Antigen References	1. Suda T, *et al.* 1997. *J. Exp. Med.* 12:204. 2. Kayagaki N, *et al.* 1995. *J. Exp. Med.* 182:1777. 3. Tanaka M, *et al.* 1995. *EMBO J.* 14:1129.
Gene ID	356

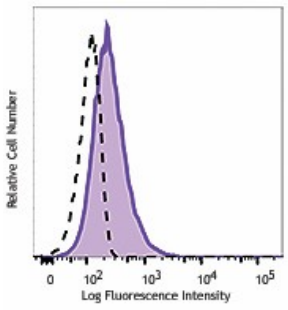
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

Biotin anti-human CD178 (Fas-L), PE anti-human CD178 (Fas-L), Purified anti-human CD178 (Fas-L), Brilliant Violet 421™ anti-human CD178 (Fas-L), TotalSeq™-A0177 anti-human CD178 (Fas-L), Ultra-LEAF™ Purified anti-human CD178 (Fas-L), PE/Cyanine7 anti-human CD178 (Fas-L), TotalSeq™-C0177 anti-human CD178 (Fas-L) Antibody, APC anti-human CD178 (Fas-L)

Product Data



Human Fas Ligand transfected cells were stained with CD178 (clone NOK-1) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ isotype control (open histogram).

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