

TotalSeq™-C0177 anti-human CD178 (Fas-L) Antibody

Catalog# / Size	306419 / 10 µg
Clone	NOK-1
Regulatory Status	RUO
Workshop	VII 70322
Other Names	Fas Ligand (FasL), CD95L, TNFSF6, Fas-L
Isotype	Mouse IgG1, κ
Barcode Sequence	CCGGTCCTCTGTATT
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 1 mM EDTA
Preparation	The antibody was purified by chromatography and conjugated with TotalSeq™-C oligomer under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	PG - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis and the oligomer sequence is confirmed by sequencing. TotalSeq™-C antibodies are compatible with 10x Genomics Chromium Single Cell Immune Profiling Solution .

To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.

Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.

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
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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).

Additional Product Notes

TotalSeq™ reagents are designed to profile protein levels at a single cell level following an optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. [10x Genomics Chromium System and Reagents](#)) and sequencer (e.g. Illumina analyzers) are required. Please contact [technical support](#) for more information, or visit [biolegend.com/totalseq](#).

The barcode flanking sequences are CGGAGATGTGTATAAGAGACAGNNNNNNNNNN (PCR handle), and NNNNNNNNNCCCATATAAGA*A*A (capture sequence). N represents either randomly selected A, C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Scientific Poster Library](#).

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)
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8. Kruger K, *et al.* 2011. *J. Appl. Physiol.* 110:1226. [PubMed](#)
9. Qin G, *et al.* 2012. *J. Infect. Dis.* [PubMed](#)
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RRID

AB_2890741 (BioLegend Cat. No. 306419)

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	<ol style="list-style-type: none">1. Suda T, <i>et al.</i> 1997. <i>J. Exp. Med.</i> 12:204.2. Kayagaki N, <i>et al.</i> 1995. <i>J. Exp. Med.</i> 182:1777.3. Tanaka M, <i>et al.</i> 1995. <i>EMBO J.</i> 14:1129.
Gene ID	356

Related Protocols

[TotalSeq™-B or -C with 10x Feature Barcoding Technology](#)

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)

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