

PE anti-mouse CD178 (FasL) Antibody

Catalog# / Size	106605 / 50 µg 106606 / 200 µg
Clone	MFL3
Regulatory Status	RUO
Other Names	Fas Ligand, FasL, Apo-1 Ligand, CD95 Ligand, TNFSF6
Isotype	Armenian Hamster IgG
Description	CD178 is a 40 kD member of the TNF/NGF superfamily also known as Fas ligand, FasL, Apo-1 ligand, and CD95 ligand. Cell surface CD178 is expressed on activated T cells and in testis and eye. CD178 is upregulated in activated T cells upon TCR re-engagement and has been shown to induce autocrine and paracrine T cell death. CD178 expression in the eye and testis has been shown to participate in immune privilege at these sites. CD178 can be cleaved from the surface by metalloproteases, and "soluble" CD178 may block the activities of membrane-bound CD178. CD178 binds to CD95 (Fas) to induce apoptotic cell death implicated in the maintenance of peripheral tolerance. CD178/CD95 interactions have also been implicated in the proliferation of CD8 ⁺ cells and neutrophil extravasation, chemotaxis, and survival. The MFL3 antibody recognizes CD178 in a wide array of mouse strains and has been reported to block CD178/CD95 induced apoptosis.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Armenian Hamster
Immunogen	B6 mouse FasL cDNA-transfected baby hamster kidney (B6 FasL/BHK) cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
Concentration	0.2 mg/ml
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 ≤ 0.25 µg per 10 ⁶ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: inhibition of the cytotoxicity ¹⁻³ and immunofluorescence microscopy ⁴ . 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. 106606) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated antibody (Cat. No. 106604) or biotinylated anti-Armenian hamster IgG (Cat. No. 405501) second step, followed by SAv-PE (Cat. No. 405204). The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. Nos. 106612).

Application References

- Fuller CL, *et al.* 1999. *J. Immunol.* 162:6337.
- Kayagaki N, *et al.* 1997. *P. Natl. Acad. Sci. USA* 94:3914.
- Seko Y, *et al.* 2002. *J. Am. Coll. Cardiol.* 39:1399.

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6. Oida T, *et al.* 2011. *PLoS ONE* 6(4):e18365. (Block) [PubMed](#).
7. Oura R, *et al.* 2013. *J. Immunol.* 190:578. [PubMed](#).

Product Citations

1. Mendonça-Vieira LR, *et al.* 2021. *Viruses.* 13:. [PubMed](#)
2. Li X, *et al.* 2022. *Nat Commun.* 13:2794. [PubMed](#)
3. Donado CA, *et al.* 2020. *Cell Reports.* 31(1):107466. [PubMed](#)
4. Castillo–Dela Cruz P, *et al.* 2020. *Cell Reports.* 29(8):2270-2283.e7.. [PubMed](#)
5. Cannons JL, *et al.* 2021. *Cell Rep.* 37:109804. [PubMed](#)
6. Schleicher R, *et al.* 2015. *Blood.* 126: 1483-1493. [PubMed](#)
7. Huang J, *et al.* 2014. *J Immunol.* 192:1972. [PubMed](#)
8. Severance AL, *et al.* 2022. *iScience.* 25:104400. [PubMed](#)
9. Oida T, Weiner H 2010. *J Immunol Methods.* 362:195. [PubMed](#)
10. Daneshmandi S, *et al.* 2021. *Cell Reports.* 34(10):108831. [PubMed](#)
11. Wallace JG, *et al.* 2021. *J Allergy Clin Immunol.* 147:743. [PubMed](#)
12. Jain A, *et al.* 2020. *Nat Immunol.* 0.920138889. [PubMed](#)
13. Timilshina M, *et al.* 2020. *Cell Reports.* 27(10):2948-2961.e7.. [PubMed](#)
14. Daglas M, *et al.* 2019. *Cell Rep.* 29:1178. [PubMed](#)

RRID

AB_313278 (BioLegend Cat. No. 106605)
AB_313279 (BioLegend Cat. No. 106606)

Antigen Details

Structure	TNF superfamily, 40 kD
Distribution	Activated T cells, spleen, testis, eye
Function	Induces apoptosis
Ligand/Receptor	Fas (CD95)
Cell Type	T cells, Tregs
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Immunology, Neuroscience
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none">1. Barclay A, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press.2. Nagata S. 1999. <i>Annu Rev Genet.</i> 33:209.3. Takahashi T, <i>et al.</i> 1994. <i>Cell.</i> 76:969.4. Hill LL, <i>et al.</i> 1999. <i>Science.</i> 285:898.
Gene ID	14103

Related Protocols

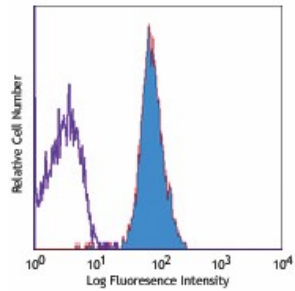
[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-mouse CD178 (FasL), PE anti-mouse CD178 (FasL), Purified anti-mouse CD178 (FasL), APC anti-mouse CD178 (FasL), Ultra-LEAF™ Purified anti-mouse CD178 (FasL), TotalSeq™-A1012 anti-mouse CD178 (FasL), TotalSeq™-C1012 anti-mouse CD178 (FasL)

Product Data

Mouse Fas Ligand transfected cells
stained with MFL3 PE



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