

## Ultra-LEAF™ Purified anti-human CD178 (Fas-L) Antibody

<b>Catalog# / Size</b>	306415 / 100 µg 306416 / 1 mg
<b>Clone</b>	NOK-1
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	VII 70322
<b>Other Names</b>	Fas Ligand (FasL), CD95L, TNFSF6, Fas-L
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Baboon
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	L5178Y mouse T lymphoma cells expressing recombinant human FasL
<b>Formulation</b>	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.01 EU/µg of the protein (<0.001 ng/µg of the protein) as determined by the LAL test.
<b>Preparation</b>	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
<b>Concentration</b>	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. To obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">ICC, IP, WB - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunoprecipitation <sup>1,2</sup> , immunofluorescence microscopy <sup>3</sup> , immunocytochemistry <sup>2</sup> , blocking of Fas induced apoptosis <sup>1</sup> , and Western blotting <sup>11</sup> . 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](#)

## Product Citations

1. Donado CA, *et al.* 2020. *Cell Reports.* 31(1):107466. [PubMed](#)

## RRID

AB\_2810458 (BioLegend Cat. No. 306415)  
AB\_2810459 (BioLegend Cat. No. 306416)

## Antigen Details

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<b>Structure</b>	TNF superfamily, type II glycoprotein, 38-42 kD, 26 kD soluble form
<b>Distribution</b>	Activated T cells, NK cells, testis, eye, neutrophils, Clara type II cells
<b>Function</b>	Apoptosis, immune privilege
<b>Ligand/Receptor</b>	CD95
<b>Cell Type</b>	Neutrophils, NK cells, T cells
<b>Biology Area</b>	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Immunology, Neuroscience
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Suda T, <i>et al.</i> 1997. <i>J. Exp. Med.</i> 12:204.</li><li>2. Kayagaki N, <i>et al.</i> 1995. <i>J. Exp. Med.</i> 182:1777.</li><li>3. Tanaka M, <i>et al.</i> 1995. <i>EMBO J.</i> 14:1129.</li></ol>
<b>Gene ID</b>	<a href="#">356</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

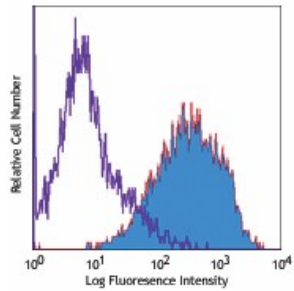
## Other Formats

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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

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Human Fas Ligand transfected cells stained with LEAF™ purified NOK-1, followed by biotinylated anti-mouse IgG and Sav-PE

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