

PerCP/Fire™ 806 anti-human CD154 (CD40L) Antibody

Catalog# / Size	310865 / 25 tests 310866 / 100 tests
Clone	24-31
Regulatory Status	RUO
Other Names	CD40L, gp39, TRAP, T-BAM, TNFSF5
Isotype	Mouse IgG1, κ
Description	CD154 (CD40 ligand) is also known as CD40L, gp39, TRAP and T-BAM. CD40 ligand is a 32-39 kD type II transmembrane glycoprotein. It is a member of the TNF superfamily and is expressed on activated T cells. It has been reported to be important for B cell costimulation following binding of its receptor, CD40. Additionally, binding of CD40L to CD40 on B cells promotes the secretion of immunoglobulin and Ig isotype switching. CD40L is also involved in the regulation of cytokine production by T cells.

Product Details

Verified Reactivity	Human
Reported Reactivity	Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
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 PerCP/Fire™ 806 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
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. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Fire™ 806 has a maximum excitation of 478 nm and a maximum emission of 806 nm.
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence microscopy ^{1,3} and blocking of T cell-dependent B cell differentiation ^{1,2,4,5} . The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 310812). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 310828) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).
Application References	<ol style="list-style-type: none">1. Brams P, <i>et al.</i> 2001. <i>Int. Immunopharmacol.</i> 1:277. (Block, IF)2. Rushworth SA, <i>et al.</i> 2002. <i>Transplantation</i> 73:635. (Block)3. Berner B, <i>et al.</i> 2000. <i>Ann. Rheum. Dis.</i> 59:190. (IF)4. Nordström T, <i>et al.</i> 2006. <i>J. Leukocyte Biol.</i> 79:319. (Block)5. Zhang AL, <i>et al.</i> 2007. <i>Blood</i> doi:10.1182/blood-2007-02-076364. (Block) PubMed6. Kuchen S, <i>et al.</i> 2007. <i>J. Immunol.</i> 179:5886.7. Matus-Nicoderms R, <i>et al.</i> 2011. <i>J. Immunol.</i> 186:2164. PubMed8. Peterson VM, <i>et al.</i> 2017. <i>Nat. Biotechnol.</i> 35:936. (PG)
(PubMed link indicates BioLegend citation)	

RRID

AB_3683323 (BioLegend Cat. No. 310865)
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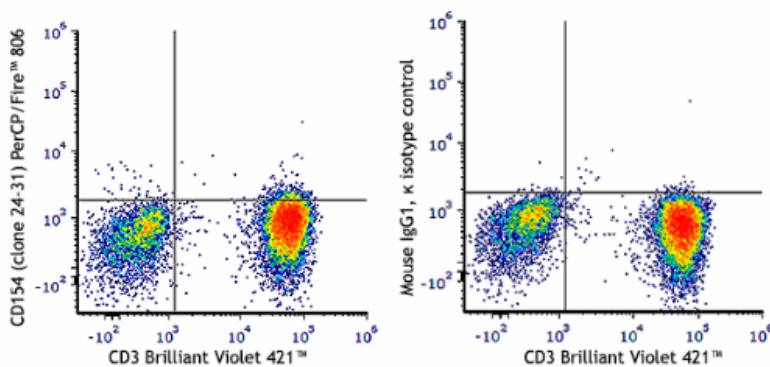
Antigen Details

Structure	TNF superfamily, type II transmembrane glycoprotein, cleaved as soluble CD40L, 32-39 kD
Distribution	Activated T cells
Function	B cell costimulation
Ligand/Receptor	CD40
Cell Type	T cells, Tregs
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	1. Najafian N, <i>et al.</i> 2003. <i>Expert Opin. Biol. Ther.</i> 3:227. 2. Racke M, <i>et al.</i> 2002. <i>Expert Opin. Ther. Targets.</i> 6:275. 3. Ford G, <i>et al.</i> 1999. <i>J. Immunol.</i> 162:4037.
Gene ID	959

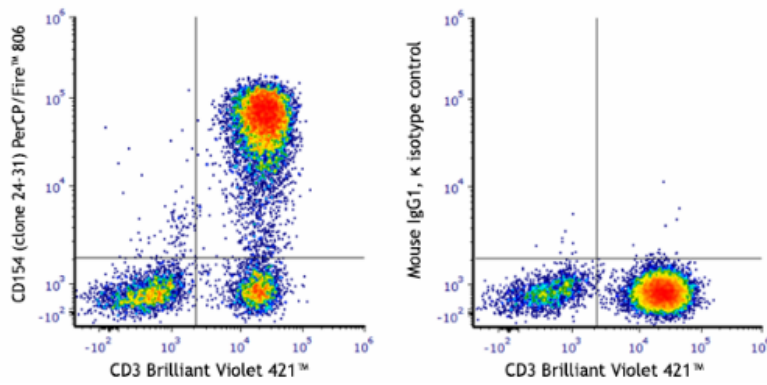
Other Formats

Purified anti-human CD154 (CD40L) Antibody, FITC anti-human CD154 (CD40L) Antibody, PE anti-human CD154 (CD40L) Antibody, PE/Cyanine5 anti-human CD154 (CD40L) Antibody, APC anti-human CD154 (CD40L) Antibody, Biotin anti-human CD154 (CD40L) Antibody, Alexa Fluor® 488 anti-human CD154 (CD40L) Antibody, Alexa Fluor® 647 anti-human CD154 (CD40L), Pacific Blue™ anti-human CD154 (CD40L) Antibody, Brilliant Violet 785™ anti-human CD154 (CD40L) Antibody, APC/Cyanine7 anti-human CD154 (CD40L) Antibody, Brilliant Violet 421™ anti-human CD154 (CD40L) Antibody, Brilliant Violet 605™ anti-human CD154 (CD40L) Antibody, Ultra-LEAF™ Purified anti-human CD154 (CD40L), Brilliant Violet 510™ anti-human CD154 (CD40L) Antibody, PE/Cyanine7 anti-human CD154 (CD40L) Antibody, PerCP/Cyanine5.5 anti-human CD154 (CD40L) Antibody, Brilliant Violet 711™ anti-human CD154 (CD40L) Antibody, Purified anti-human CD154 (CD40L) (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD154 (CD40L) Antibody, TotalSeq™-A0032 anti-human CD154 (CD40L) Antibody, Alexa Fluor® 700 anti-human CD154 (CD40L), APC/Fire™ 750 anti-human CD154 (CD40L), TotalSeq™-C0032 anti-human CD154 (CD40L) Antibody, TotalSeq™-B0032 anti-human CD154 (CD40L) Antibody, TotalSeq™-D0032 anti-human CD154 (CD40L) Antibody, PE/Fire™ 640 anti-human CD154 (CD40L), PE/Fire™ 810 anti-human CD154 (CD40L), PerCP/Fire™ 780 anti-human CD154 (CD40L), PE/Fire™ 700 anti-human CD154 (CD40L), Spark Red™ 718 anti-human CD154 (CD40L) (Flexi-Fluor™) Antibody, Brilliant Violet 650™ anti-human CD154 (CD40L) Antibody, PerCP/Fire™ 806 anti-human CD154 (CD40L) Antibody, Spark Blue™ 574 anti-human CD154 (CD40L) (Flexi-Fluor™) Antibody, Spark Blue™ 550 anti-human CD154 (CD40L) (Flexi-Fluor™) Antibody, PE/Cyanine7 anti-human CD154

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) Brilliant Violet 421™ and anti-human CD154 (clone 24-31) PerCP/Fire™ 806 (left) or mouse IgG1, κ PerCP/Fire™ 806 isotype control (right).



PMA+ionomycin stimulated (6 hrs) human peripheral blood cells were stained with anti-human CD3 (clone UCHT1) Brilliant Violet 421™ and anti-human CD154 (clone 24-31) PerCP/Fire™ 806 (left) or mouse IgG1, κ PerCP/Fire™ 806 isotype control (right). Data shown are gated on the lymphocyte population.

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