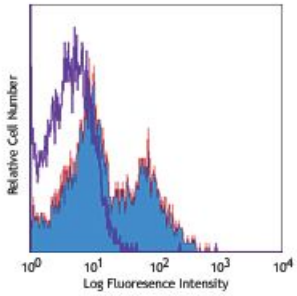
SONY

Product Data Sheet

APC anti-human CD154

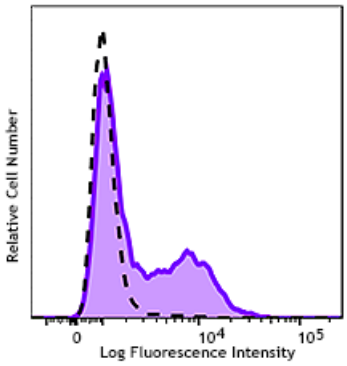
Catalog # / Size:	2154050 / 100 tests 2154045 / 25 tests
Clone:	24-31
Isotype:	Mouse IgG1, κ
Reactivity:	Human, Non-human primate, Other
Preparation:	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Workshop Number:	HCDM listed
Concentration:	Lot-specific



TPA+ ionomycin-stimulated human PBMCs (5 hours) stained with 24-31 APC

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
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/microg).



Human T leukemia cell line Jurkat treated (filled histogram) or non-treated (open histogram) with anti-human CD95 (Fas) 4 hours, fixed with Fixation Buffer (Cat No. 420801), permeabilized with True-Phos™ Perm Buffer (Cat No. 425401), then stained with anti-Cleaved PARP (Asp214) recombinant (clone QA17A17) PE/Cyanine7.

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Application References:

1. Brams P, *et al.* 2001. *Int. Immunopharmacol.* 1:277. (Block, IF)
2. Rushworth SA, *et al.* 2002. *Transplantation* 73:635. (Block)
3. Berner B, *et al.* 2000. *Ann. Rheum. Dis.* 59:190. (IF)
4. Nordström T, *et al.* 2006. *J. Leukocyte Biol.* 79:319. (Block)
5. Zhang AL, *et al.*2007. *Blood* doi:10.1182/blood-2007-02-076364. (Block) PubMed
6. Kuchen S, *et al.* 2007. *J. Immunol.* 179:5886.
7. Matus-Nicodermos R, *et al.* 2011. *J. Immunol.* 186:2164. PubMed
8. Peterson VM, *et al.* 2017. *Nat. Biotechnol.* 35:936. (PG)

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.

Antigen References:

1. Najafian N, *et al.* 2003. *Expert Opin. Biol. Ther.* 3:227.
2. Racke M, *et al.* 2002. *Expert Opin. Ther. Targets.* 6:275.
3. Ford G, *et al.* 1999. *J. Immunol.* 162:4037.

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