

## PE/Cy5 anti-human CD154

**Catalog # / Size:** 310807 / 25 tests  
310808 / 100 tests

**Clone:** 24-31

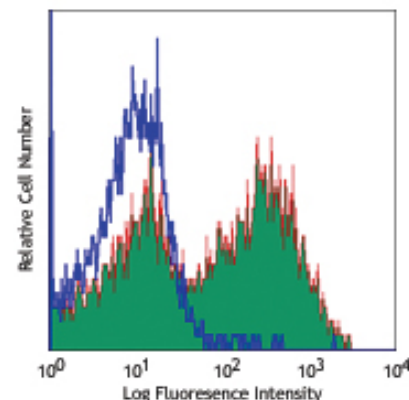
**Isotype:** Mouse IgG1,  $\kappa$

**Reactivity:** Human, **Cross-Reactivity:** Cynomolgus, Rhesus

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE/Cy5 under optimal conditions. The solution is free of unconjugated PE/Cy5 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



TPA+ ionomycin-stimulated human PBMCs (6 hours) stained with 24-31 PE/Cy5

## Applications:

**Applications:** FC - Quality tested

**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  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunofluorescence microscopy<sup>1,3</sup> and blocking of T cell-dependent B cell differentiation<sup>1,2,4,5</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m 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/ $\mu$ g).

Cy3, Cy5, Cy5.5 and Cy7 are subject to proprietary rights of GE Healthcare Bio-Sciences Corp. and Carnegie Mellon University and made and sold under license from GE Healthcare Bio-Sciences Corp. Sale of this product is licensed for research use only.

- 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

**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.

### Related Products:

Product	Clone	Application
PE anti-human CD40	G28.5	FC
PE/Cy5 Mouse IgG1, $\kappa$ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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