

**APC anti-human CD154**

**Catalog # / Size:** 2154045 / 25 tests  
2154050 / 100 tests

**Clone:** 24-31

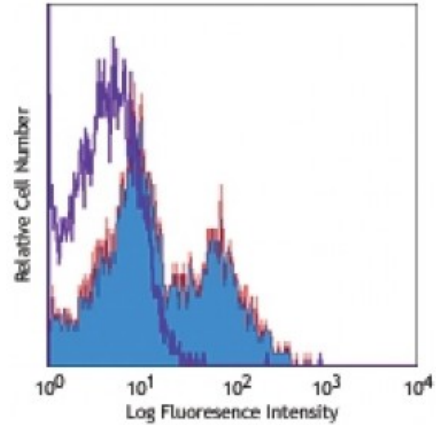
**Isotype:** Mouse IgG1, κ

**Reactivity:** Human

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

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

**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 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL 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<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/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).

- 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-Nicoderemos 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.