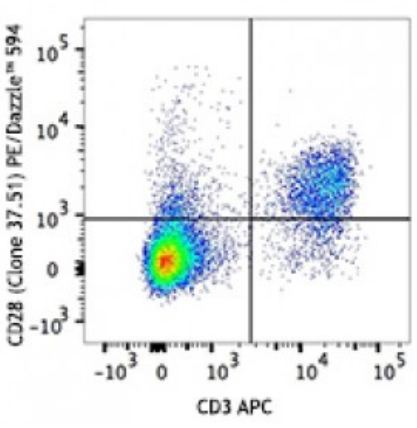
SONY

Product Data Sheet

PE/Dazzle™ 594 anti-mouse CD28

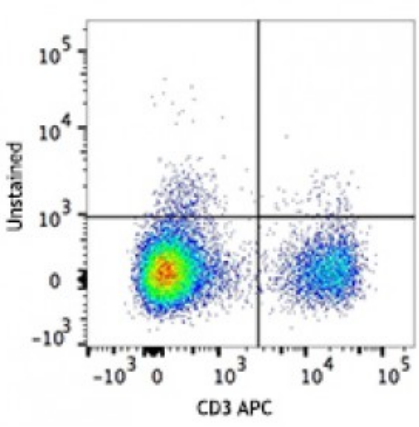
Catalog # / Size:	1110615 / 25 µg 1110620 / 100 µg
Clone:	37.51
Isotype:	Hamster IgG
Immunogen:	C57BL/6 mouse T-cell lymphoma EL-4
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5



C57BL/6 mouse splenocytes were stained with CD3 (clone 145-2C11) APC and CD28 (clone 37.51) PE/Dazzle™ 594 (top) or C57BL/6 mouse splenocytes with CD3 (clone 145-2C11) APC (bottom).

Applications:

Applications:	Flow Cytometry
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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
Application Notes:	Additional reported applications (for the relevant formats) include: immunoprecipitation1, *in vitro* costimulation of T and NK cells1, *in vitro* blocking of allogeneic mixed leukocyte response and inhibition of MHC-unrestricted CTL cytotoxicity[3,4], *in vitro* induction of thymocyte differentiation[2,5-9,11], and immunohistochemical staining of acetone-fixed frozen sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 102112). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No.



102116) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

This product may be used for research purposes only. It is not licensed for resale and may only be used by the buyer. This product may not be used and is not licensed for clinical assays where the results of such assays are provided as a diagnostic service. If a diagnostic or therapeutic use is anticipated then a license must be requested from the University of California. The availability of such diagnostic and therapeutic use license(s) cannot be guaranteed from the University of California.

Application References:

1. Gross JA, *et al.* 1992. *J. Immunol.* 149:380. (IP, Costim)
2. Cibotti R, *et al.* 1997. *Immunity* 6:245. (Costim)
3. Masten BJ, *et al.* 1997. *Am. J. Respir. Cell Mol. Biol.* 16:335. (Block)
4. Nishio M, *et al.* 1996. *J. Immunol.* 157:4347. (Block)
5. Zhang N and He Y-W, 2005. *J. Exp. Med.* 202:395. (Costim)
6. Terrazas LI, *et al.* 2005. *Intl. J. Parasitology.* 35:1349. (Costim)
7. Perchonock CE, *et al.* 2006. *Mol Cell Biol.* 26(16):6005. (Costim)
8. Wang W, *et al.* 2007. *J. Immunol.* 178:4885. (Costim)
9. Pua HH, *et al.* 2007. *J. Exp. Med.* 204:25. (Costim)
10. Perchonock CE, *et al.* 2007. *J. Immunol.* 179:1768.
11. Barbi J, *et al.* 2007. *Blood* 110:2215.
12. Milpied P, *et al.* 2011. *Blood* 118:2993. PubMed
13. Cunningham NR, *et al.* 2011. *Int Immunol.* 23:693. PubMed
14. Crispin JC, *et al.* 2012. *J. Immunol.* 188:3567. PubMed
15. Li CR, *et al.* 2014. *J Immunol.* 192:1425. PubMed
16. Blankenhaus B, *et al.* 2014. *PLoS Pathog.* 10:1003913. PubMed

---

Description: CD28 is a 44 kD glycoprotein, also known as Tp44 or T44. It is a member of the Ig superfamily, expressed on thymocytes, most peripheral T cells, and NK cells. In association with CD80 (B7-1) and CD86 (B7-2), CD28 acts as the second signal for T and NK cell activation and proliferation. The 37.51 antibody has been reported to augment *in vitro* T cell proliferation and cytokine production, and promote CTL development.

Antigen References:

1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Lenschow DJ, *et al.* 1996. *Annu. Rev. Immunol.* 14:233.
3. Gross JA, *et al.* 1992. *J. Immunol.* 149:380.