Product Data Sheet

PE/Cy7 anti-mouse CD28

Catalog # / Size: $1110625 / 25 \mu g$

1110630 / 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

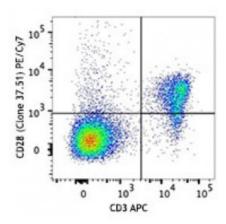
chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7

and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



C57BL/6 mouse splenocytes were stained with CD3 APC and CD28 (clone 37.51) PE/Cy7.

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 ≤0.125 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each

application.

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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 LEAFTM purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 102112). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAFTM purified antibody (Cat. No. 102116) with a lower endotoxin limit than standard LEAFTM purified antibodies (Endotoxin <0.01 EU/microg).

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Application 1. Gross JA, et al. 1992. J. Immunol. 149:380. (IP, Costim)

References:

- 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.