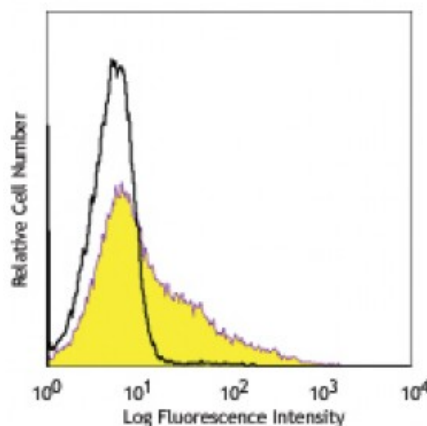


**PerCP/Cy5.5 anti-human CD137 (4-1BB)**

<b>Catalog # / Size:</b>	2149065 / 25 tests 2149070 / 100 tests
<b>Clone:</b>	4B4-1
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Immunogen:</b>	Ectodomain of recombinant human 4-1BB fusion protein
<b>Reactivity:</b>	Human
<b>Preparation:</b>	The antibody was purified by affinity chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
<b>Workshop Number:</b>	VI C-7
<b>Concentration:</b>	Lot-specific



PHA-stimulated (3 day) human peripheral blood lymphocytes stained with 4B4-1 PerCP/Cy5.5

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, please see your vial or your CoA for the suggested usage per test for your lot. It is recommended that the reagent be titrated for optimal performance for each application.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>1,4</sup>, inhibition of cytokine production<sup>2,3</sup>, and ELISA. For most successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 309804) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated anti-mouse IgG second step (Cat. No. 405303), followed by Streptavidin-PE (Cat. No. 405204)).

**Application References:**

1. Garni-Wagner B, *et al.* 1996. *Cell. Immunol.* 169:91. (IP)
2. Salih HR, *et al.* 2000. *J. Immunol.* 165:2903. (FA)
3. Kienzle G, *et al.* 2000. *Int. Immunol.* 12:73. (FA)
4. Langstein J, *et al.* 1998. *J. Immunol.* 160:2488. (IP)

**Description:** CDw137 is a 39 kD transmembrane protein also known as 4-1BB. It is expressed on activated T cells. CDw137 is a type I membrane protein and a member of the tumor necrosis factor receptor superfamily. CDw137 appears to be important for T cell proliferation and survival, and induces monocyte activation through its interaction with 4-1BB ligand.

**Antigen** 1. Gruss H, *et al.* 1995. *Blood* 85:3378.

- References:**
2. Sica G, *et al.* 2000. *Adv. Exp. Med. Biol.* 465:355.
  3. Alderson M, *et al.* 1994. *Eur. J. Immunol.* 24:2219.
  4. Schwarz H, *et al.* 199