

Biotin anti-human CD137 (4-1BB)

Catalog # / Size: 309806 / 100 µg

Clone: 4B4-1

Isotype: Mouse IgG1, κ

Workshop Number: VI C-7

Immunogen: Ectodomain of recombinant human 4-1BB fusion protein

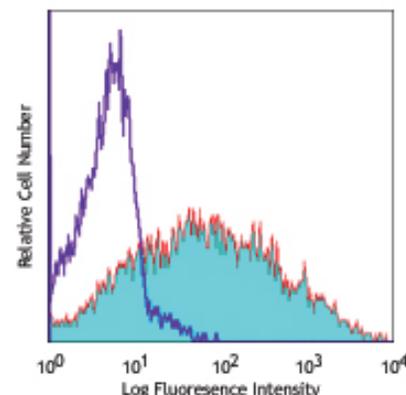
Reactivity: Human, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus

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

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. **Do not freeze.**



PHA-stimulated (4 days) human peripheral blood mononuclear cells stained with biotinylated 4B4-1, followed by Sav-PE

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.5 µg per million cells in 100 µl volume or 100 µl 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: immunoprecipitation^{1,4}, inhibition of cytokine production^{2,3}, 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 SAv-PE (Cat. No. 405204)).

Application References:

- Garni-Wagner B, *et al.* 1996. *Cell. Immunol.* 169:91. (IP)
- Salih HR, *et al.* 2000. *J. Immunol.* 165:2903. (FA)
- Kienzle G, *et al.* 2000. *Int. Immunol.* 12:73. (FA)
- 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 References:

- Gruss H, *et al.* 1995. *Blood* 85:3378.
- Sica G, *et al.* 2000. *Adv. Exp. Med. Biol.* 465:355.
- Alderson M, *et al.* 1994. *Eur. J. Immunol.* 24:2219.
- Schwarz H, *et al.* 1996. *Blood* 87:2839.

Related Products:

Product	Clone	Application
Biotin Mouse IgG1, κ 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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