

## Alexa Fluor® 700 anti-human CD137 (4-1BB)

**Catalog # / Size:** 309816 / 100 µg

**Clone:** 4B4-1

**Isotype:** Mouse IgG1, κ

**Workshop Number:** VI C-7

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

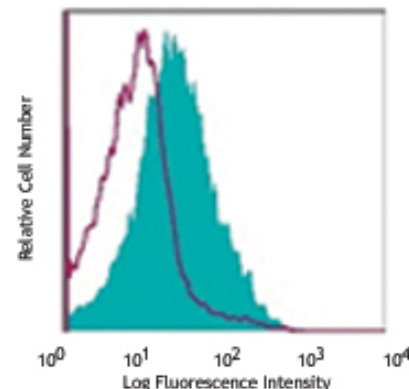
**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 700.

**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 and protected from prolonged exposure to light. **Do not freeze.**



PHA-stimulated (3 days) human peripheral blood mononuclear cells stained with 4B4-1 A700

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** This reagent is developed for immunofluorescent staining for flow cytometric analysis; the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Alexa Fluor® 700 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 700 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**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 SA<sub>v</sub>-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

Alexa Fluor® 700 Mouse IgG1, κ Isotype Ctrl  
 Cell Staining Buffer  
 RBC Lysis Buffer (10X)  
 Human TruStain FcX™ (Fc Receptor Blocking Solution)

**Clone**  
 MOPC-21

**Application**  
 FC, ICFC  
 FC, ICC, ICFC  
 FC, ICFC  
 FC, ICC, ICFC



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