

PE/Dazzle™ 594 anti-human CD137 (4-1BB) Antibody

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| Catalog# / Size | 309825 / 25 tests 309826 / 100 tests |
| Clone | 4B4-1 |
| Regulatory Status | RUO |
| Workshop | VI C-7 |
| Other Names | 4-1BB, ILA, CD137, TNFRSF9 |
| Isotype | Mouse IgG1, κ |
| Description | CD137 is a 39 kD transmembrane protein also known as 4-1BB. It is expressed on activated T cells. CD137 is a type I membrane protein and a member of the tumor necrosis factor receptor superfamily. CD137 appears to be important for T cell proliferation and survival, and induces monocyte activation through its interaction with 4-1BB ligand. |

Product Details

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| Verified Reactivity | Human |
| Reported Reactivity | Chimpanzee, Baboon, Cynomolgus, Rhesus |
| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Immunogen | Ectodomain of recombinant human 4-1BB fusion protein |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.) |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze. |
| Application | FC - Quality tested |
| 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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm. |
| Excitation Laser | Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm) |
| 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 Streptavidin-PE (Cat. No. 405204)). |
| Application References | 1. Garni-Wagner B, <i>et al.</i> 1996. <i>Cell. Immunol.</i> 169:91. (IP) 2. Salih HR, <i>et al.</i> 2000. <i>J. Immunol.</i> 165:2903. (FA) 3. Kienzle G, <i>et al.</i> 2000. <i>Int. Immunol.</i> 12:73. (FA) 4. Langstein J, <i>et al.</i> 1998. <i>J. Immunol.</i> 160:2488. (IP) |

Product Citations

1. de Jonge K *et al.* 2019. Scientific reports. 9(1):4487 . [PubMed](#)
2. Di Blasi D, *et al.* 2019. Cell Mol Gastroenterol Hepatol. 0.510416667. [PubMed](#)
3. Stephenson E, *et al.* 2021. Nat Med. 27:904. [PubMed](#)
4. Vikkurthi R, *et al.* 2022. Nat Microbiol. 7:974. [PubMed](#)
5. Yang W, *et al.* 2019. Nat Med. 25:767. [PubMed](#)
6. Vadrevu KM, *et al.* 2022. Sci Rep. 12:12038. [PubMed](#)
7. NULL, *et al.* 2022. Cell. 185:916. [PubMed](#)
8. Tausin A, *et al.* 2021. Cell Host Microbe. . [PubMed](#)
9. Faissner S, *et al.* 2022. Front Immunol. 13:980526. [PubMed](#)

RRID AB_2566259 (BioLegend Cat. No. 309825)
 AB_2566260 (BioLegend Cat. No. 309826)

Antigen Details

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|---------------------------|--|
| Structure | TNFR superfamily, type I transmembrane protein, 30 kD |
| Distribution | Activated T cells |
| Function | T cell costimulation |
| Ligand/Receptor | 4-1BB ligand |
| Cell Type | T cells |
| Biology Area | Costimulatory Molecules, Immunology |
| Molecular Family | CD Molecules |
| Antigen References | <ol style="list-style-type: none"> 1. Gruss H, <i>et al.</i> 1995. <i>Blood</i> 85:3378. 2. Sica G, <i>et al.</i> 2000. <i>Adv. Exp. Med. Biol.</i> 465:355. 3. Alderson M, <i>et al.</i> 1994. <i>Eur. J. Immunol.</i> 24:2219. 4. Schwarz H, <i>et al.</i> 1996. <i>Blood</i> 87:2839. |
| Gene ID | 3604 |

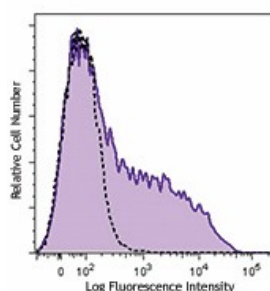
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD137 (4-1BB), PE anti-human CD137 (4-1BB), Biotin anti-human CD137 (4-1BB), PE/Cyanine5 anti-human CD137 (4-1BB), APC anti-human CD137 (4-1BB), PerCP/Cyanine5.5 anti-human CD137 (4-1BB), Alexa Fluor® 700 anti-human CD137 (4-1BB), PE/Cyanine7 anti-human CD137 (4-1BB), Brilliant Violet 421™ anti-human CD137 (4-1BB), APC/Cyanine7 anti-human CD137 (4-1BB), Brilliant Violet 605™ anti-human CD137 (4-1BB), Alexa Fluor® 647 anti-human CD137 (4-1BB), PE/Dazzle™ 594 anti-human CD137 (4-1BB), Brilliant Violet 650™ anti-human CD137 (4-1BB), Brilliant Violet 711™ anti-human CD137 (4-1BB), APC/Fire™ 750 anti-human CD137 (4-1BB), TotalSeq™-A0355 anti-human CD137 (4-1BB), TotalSeq™-B0355 anti-human CD137 (4-1BB), TotalSeq™-C0355 anti-human CD137 (4-1BB), Ultra-LEAF™ Purified anti-human CD137 (4-1BB), Brilliant Violet 750™ anti-human CD137 (4-1BB), TotalSeq™-D0355 anti-human CD137 (4-1BB)

Product Data



PHA-stimulated (three days) human peripheral blood lymphocytes were stained with CD137 (clone 4B4-1) PE/Dazzle™ 594 (filled histogram) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (open histogram).

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