

# CD137 (4-1BB) Monoclonal Antibody (4B4 (4B4-1)), Alexa Fluor™ 700, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Alexa Fluor™ 700, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	4B4 (4B4-1)
Conjugate	Alexa Fluor™ 700
Excitation/Emission Max	696/719 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2848467

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	2 Publications
ELISA (ELISA)	-	1 Publication

## Product Specific Information

**Description:** This 4B4 (4B4-1) monoclonal antibody reacts with human CD137 (also known as 4-1BB or TNFRSF9), which is an inducible member of the TNFR family of costimulatory molecules expressed on T cells, natural killer cells, dendritic cells, granulocytes, and mast cells. Involved in recruiting TNFR-associated factors (TRAF) 1 and 2, CD137 signaling plays a role in T cell activation, maintaining the survival of activated and CD8 memory T cells, as well as suppressing myelopoiesis and dendritic cell development. Stimulation of this receptor has also been shown to promote expansion of CD4+CD25+ T regulatory cells ex vivo. The ligand for CD137, 4-1BBL, is found on activated macrophages, mature B cells, hematopoietic stem cells, and myeloid progenitor cells.

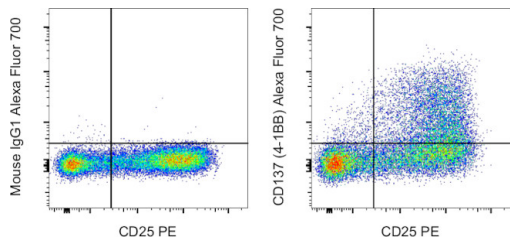
**Applications Reported:** This 4B4 (4B4-1) antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 4B4 (4B4-1) antibody has been pre-diluted and tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This may be used at 5 µL (0.25 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

Alexa Fluor 700 emits at 723 nm and can be excited with the red laser (633-647 nm). Most instruments will require a 685 LP mirror and 710/20 band pass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 723 nm; Laser: Red Laser

Product Images For CD137 (4-1BB) Monoclonal Antibody (4B4 (4B4-1)), Alexa Fluor™ 700, eBioscience™



**CD137 (4-1BB) Antibody (56-1379-42) in Flow**  
Normal human peripheral blood cells were stimulated for 72 hours with Con A (Product # 00-4978-03) and then stained with CD25 Monoclonal Antibody, PE (Product # 12-0257-42) and Mouse IgG1 kappa Isotype Control, Alexa Fluor 700 (Product # 56-4714-80) (left) or CD137 (4-1BB) Monoclonal Antibody, Alexa Fluor 700 (right). Cells in the lymphocyte gate were used for analysis..

View more figures on [thermofisher.cn](https://thermofisher.cn)

3 References

Flow Cytometry (2)

Oncoimmunology	Year 2022
<b>Neoantigens retention in patient derived xenograft models mediates autologous T cells activation in ovarian cancer.</b>	
"Published figure using CD137 (4-1BB) monoclonal antibody (Product # 56-1379-42) in Flow Cytometry"	
Authors: Want MY,Konstorum A,Huang RY,Jain V,Matsueda S,Tsuji T,Lugade A,Odunsi K,Koya R,Battaglia S	

Oxidative medicine and cellular longevity	Year 2018
<b>Antroquinonol Exerts Immunosuppressive Effect on CD8<sup>+</sup> T Cell Proliferation and Activation to Resist Depigmentation Induced by H<sub>2</sub>O<sub>2</sub>.</b>	
"Published figure using CD137 (4-1BB) monoclonal antibody (Product # 56-1379-42) in Flow Cytometry"	
Authors: Guan C,Li Q,Song X,Xu W,Li L,Xu A	

ELISA (1)

Oncotarget	Year 2017
<b>Surrogate in vitro activation of innate immunity synergizes with interleukin-7 to unleash rapid antigen-driven outgrowth of CD4+ and CD8+ human peripheral blood T-cells naturally recognizing MUC1, HER2 /neu and other tumor-associated antigens.</b>	
"Published figure using CD137 (4-1BB) monoclonal antibody (Product # 56-1379-42) in ELISA"	
Authors: Pathangey LB,McCurry DB,Gendler SJ,Dominguez AL,Gorman JE,Pathangey G,Mihalik LA,Dang Y,Disis ML,Cohen PA	

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