

CD137 (4-1BB) Monoclonal Antibody (17B5), Functional Grade, eBioscience™

Product Details	
Size	500 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Syrian hamster / IgG
Recommended Isotype Control	Syrian Hamster IgG Isotype Control, Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	17B5
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_469069

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	8 Publications
Functional Assay (FN)	Assay-Dependent	2 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

Description: The 17B5 monoclonal antibody reacts with mouse CD137, also known as 4-1BB, a member of the TNFR superfamily. CD137 is expressed as monomers, dimers, and tetramers on the surface of activated T cells around day 4-6 after activation through the TCR complex. Interaction of CD137 with its ligand, 4-1BBL, is reported to deliver a costimulatory signal important in the T-APC interaction. Recent data suggests CD137 is expressed on Tregs and may play a role in their proliferation. The monoclonal antibody 17B5 has strong antagonistic effect in in vitro functional assays.

Applications Reported: This 17B5 antibody has been reported for use in flow cytometric analysis and functional assays.

Applications Tested: The 17B5 antibody has been tested by flow cytometric analysis of activated mouse splenocytes cultures. This can be used at less than or equal to 0.5 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/μg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

11 References

Flow Cytometry (8)

<p>The Journal of experimental medicine</p> <p>STARTRAC analyses of scRNAseq data from tumor models reveal T cell dynamics and therapeutic targets.</p> <p>"Published figure using CD137 (4-1BB) monoclonal antibody (Product # 16-1371-85) in Flow Cytometry"</p> <p>Authors: Bhatt D,Kang B,Sawant D,Zheng L,Perez K,Huang Z,Sekirov L,Wolak D,Huang JY,Liu X,DeVoss J,Manzanillo PS,Pierce N,Zhang Z,Symons A,Ouyang W</p>	<p>Year</p> <p>2021</p>
<p>Oncoimmunology</p> <p>PD-1 and LAG-3 blockade improve anti-tumor vaccine efficacy.</p> <p>"Published figure using CD137 (4-1BB) monoclonal antibody (Product # 16-1371-85) in Flow Cytometry"</p> <p>Authors: Zahm CD,Moseman JE,Delmastro LE,G Mcneel D</p>	<p>Year</p> <p>2021</p>

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Functional Assay (2)

<p>European journal of immunology</p> <p>TNF optimally activatives regulatory T cells by inducing TNF receptor superfamily members TNFR2, 4-1BB and OX40.</p> <p>"16-1371 was used in Functional assays to investigate pleiotropy in TNF inflammatory effects, showing that it activates Tregs by inducing TNFR2, 4-1BB and OX40."</p> <p>Authors: Hamano R,Huang J,Yoshimura T,Oppenheim JJ,Chen X</p>	<p>Year</p> <p>2011</p> <p>Species</p> <p>Mouse</p>
<p>Journal of immunology (Baltimore, Md. : 1950)</p> <p>The 4-1BB costimulation augments the proliferation of CD4+CD25+ regulatory T cells.</p> <p>Authors: Zheng G,Wang B,Chen A</p>	<p>Year</p> <p>2004</p>

More applications with references on thermofisher.cn

Misc (1)

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