

Datasheet for ABIN2688964
anti-CD137 antibody (Biotin)



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11 Publications

Overview

Quantity:	0.1 mg
Target:	CD137 (TNFRSF9)
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This CD137 antibody is conjugated to Biotin
Application:	Flow Cytometry (FACS)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Recombinant mouse 4-1BB
Clone:	1AH2
Isotype:	IgG1 kappa
Characteristics:	<p>The 1AH2 clone (subclone of 53A2) has been reported to react with CD137, a member of the TNFR/NGFR superfamily. The expression of CD137 has been reported to be detectable from day 3 and peaks around day 6 after activation with ConA, PMA plus ionomycin, or immobilized anti-CD3e (Cat. No. 553058). Monomers, dimers, or tetramers of the 4-1BB antigen are expressed, upon activation, on the surface of splenic T lymphocytes, thymocytes, intestinal intraepithelial T lymphocytes (IEL), and some T cell lines and clones. While stimulating T cells by IL-2, IL-4, or anti-CD28 alone does not result in the expression of CD137, addition of IL-2, IL-4, anti-CD28, or syngeneic accessory cells to splenic T cells stimulated via TCR/CD3 can result in</p>

Product Details

a high level of CD137 expression. CD137 has also been reported to be observed on IL-2 activated NK cells, but not on freshly isolated NK cells. It has been demonstrated that 4-1BB physically associates with p56 [lck] through a Cys-Arg-Cys-Pro binding site in its cytoplasmic domain, the same motif in the cytoplasmic tail of the CD4 and CD8a molecules is responsible for association with p56 [lck]. A signaling function for the CD137 Molecule in mouse T cells is indicated by reports in which cross-linking of CD137 with 1AH2 mAb resulted in enhanced proliferation of CD3e-activated splenic T cells and IEL and in enhanced cytolytic activity of IEL in response to immobilized anti-CD3e. In addition to extracellular matrix proteins which bind to CD137, a 97- kDa dimer of the TNF/NGF superfamily has been reported to be a ligand for 4-1BB (4-1BBL). This molecule has been detected on Con A-activated T cells, LPS-activated macrophages, and anti-μ-activated splenic B cells. Interaction between T and B cells through 4-1BB/4-1BBL is reported to play a role in antigen presentation, further supporting a costimulatory role for CD137 in the immune response of T lymphocytes. This antibody is routinely tested by flow cytometric analysis. Other applications were tested during antibody development only or reported in the literature.

BD Pharmingen™ Biotin Rat Anti-Mouse CD137 - Biotin - Clone 1AH2 - Isotype Rat IgG1, κ - Reactivity Ms - 0.1 mg

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
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Target Details

Target:	CD137 (TNFRSF9)
Alternative Name:	CD137 (TNFRSF9 Products)
Background:	Synonyms: 4-1BB, Ly-63
Pathways:	Cancer Immune Checkpoints

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Concentration:	0.5 mg/mL
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Handling

Buffer:	Aqueous buffered solution containing ≤ 0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Publications

Product cited in:	<p>Takeda, Oshima, Hayakawa, Akiba, Atsuta, Kobata, Kobayashi, Ito, Yagita, Okumura: "CD27-mediated activation of murine NK cells." in: Journal of immunology (Baltimore, Md. : 1950), Vol. 164, Issue 4, pp. 1741-5, (2000) (PubMed).</p> <p>Saoulli, Lee, Cannons, Yeh, Santana, Goldstein, Bangia, DeBenedette, Mak, Choi, Watts: "CD28-independent, TRAF2-dependent costimulation of resting T cells by 4-1BB ligand." in: The Journal of experimental medicine, Vol. 187, Issue 11, pp. 1849-62, (1998) (PubMed).</p> <p>DeBenedette, Shahinian, Mak, Watts: "Costimulation of CD28- T lymphocytes by 4-1BB ligand." in: Journal of immunology (Baltimore, Md. : 1950), Vol. 158, Issue 2, pp. 551-9, (1997) (PubMed).</p> <p>Hurtado, Kim, Kwon: "Signals through 4-1BB are costimulatory to previously activated splenic T cells and inhibit activation-induced cell death." in: Journal of immunology (Baltimore, Md. : 1950), Vol. 158, Issue 6, pp. 2600-9, (1997) (PubMed).</p> <p>DeBenedette, Chu, Pollok, Hurtado, Wade, Kwon, Watts: "Role of 4-1BB ligand in costimulation of T lymphocyte growth and its upregulation on M12 B lymphomas by cAMP." in: The Journal of experimental medicine, Vol. 181, Issue 3, pp. 985-92, (1995) (PubMed).</p> <p>There are more publications referencing this product on: Product page</p>
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