

Technical Data Sheet

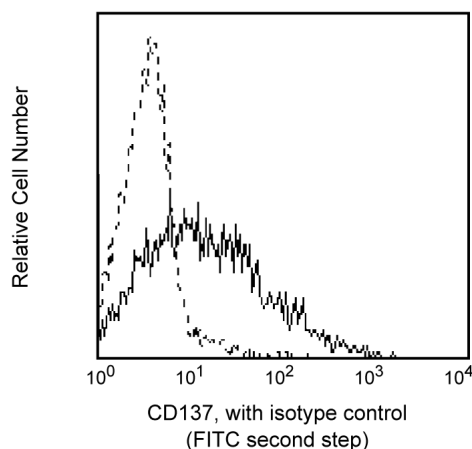
Purified Mouse Anti-Human CD137**Product Information**

Material Number:	555955
Alternate Name:	4-1BB
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	4B4-1
Isotype:	Mouse IgG1 κ
Reactivity:	QC Testing: Human
Workshop:	VI C-7
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

Reacts with 4-1BB, a 30 kDa glycoprotein expressed on activated T cells. 4-1BB can be detected on Con A or PHA-stimulated peripheral blood T cells (CD4+ and CD8+) and on CEM cells (human T-cell leukemia) following 2 day PMA and ionomycin stimulation, but not on resting T cells. 4-1BB is reported to be a participant in T-cell activation, being responsible for rescuing T cells from activation-induced apoptosis, upregulation of Th1-type, T-helper cells, downregulation of Th2-type cytokine production, and induction of cell adhesion to fibronectin.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of Con A-stimulated peripheral blood mononuclear cells (PBMC) analyzed by flow cytometry. Second step staining with Cat. No. 555988.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4° C.

Application Notes**Application**

Flow cytometry	Routinely Tested
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Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
555746	Purified Mouse IgG1 Kappa Isotype Control	0.1 mg	MOPC-21
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Gt/Ms

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

AAI Meeting, Abstract #838. San Francisco: 1997.(Biology)

AAI Meeting, Abstract #841. San Francisco: 1997.(Biology)

Garni-Wagner BA, Lee ZH, Kim YJ, Wilde C, Kang CY, Kwon BS. 4-1BB is expressed on CD45RAhiROhi transitional T cell in humans. *Cell Immunol.* 1996; 169(1):91-98.(Biology)

Hurtado JC, Kim SH, Pollok KE, Lee ZH, Kwon BS. Potential role of 4-1BB in T cell activation. Comparison with the costimulatory molecule CD28. *J Immunol.* 1995; 155(7):3360-3367.(Biology)

Zhou Z, Kim S, Hurtado J, et al. Characterization of human homologue of 4-1BB and its ligand. *Immunol Lett.* 1995; 45(1-2):67-73.(Biology)