Technical Data Sheet

# PE Mouse Anti-Human CD137 Ligand

## Product Information

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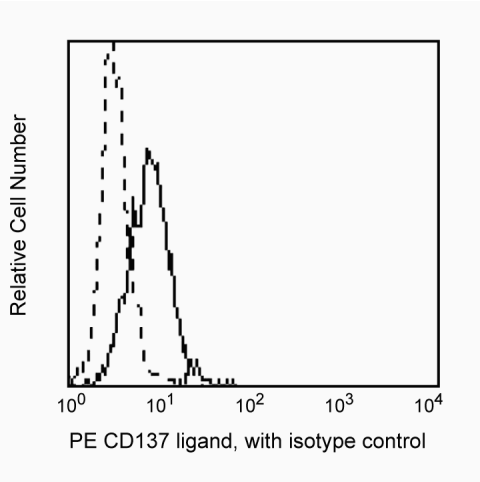
| **Material Number:** | **559446** |
| **Alternate Name:** | 4-1BB Ligand |
| **Size:** | 100 tests |
| **Vol. per Test:** | 20 µl |
| **Clone:** | C65-485 |
| **Isotype:** | Mouse IgG1, κ |
| **Reactivity:** | QC Testing: Human |
| **Workshop:** | N/A |
| **Storage Buffer:** | Aqueous buffered solution containing BSA and ≤0.09% sodium azide. |

## Description

Reacts with a type II membrane protein known as 4-1BB ligand. This molecule belongs to the TNF superfamily. It has been reported to have costimulatory function on activated T cells. Reports suggest that stimulation of activated T cells via 4-1BB ligand does not require the presence of other costimulatory molecules, including CD28. Some studies have reported human 4-1BB ligand to be expressed preferentially on primary B cells and B-cell lines. C65-485 antibody is able to react with recombinant human 4-1BB ligand (rh4-1BBL) bound to CD137 (4-1BB receptor) expressed on PHA-stimulated PBMC.




***Profile of HUT-78 cell line analyzed by flow cytometry***

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.
Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

**Application**

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| Flow cytometry | Routinely Tested |

## Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|---|---|---|---|
| 555749 | PE Mouse IgG1, κ Isotype Control | 100 tests | MOPC-21 |

## Product Notices

**BD Biosciences**

**www.bdbiosciences.com**

| United States | Canada | Europe | Japan | Asia Pacific | Latin America/Caribbean |
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| 877.232.8995 | 888.259.0187 | 32.53.720.550 | 0120.8555.90 | 65.6861.0633 | 55.11.5185.9995 |

For country-specific contact information, visit **www.bdbiosciences.com/how_to_order/**

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10e6 cells in a 100-µl experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. 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.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References


Chu NR, DeBenedette MA, Stiernholm BJ, Barber BH, Watts TH. Role of IL-12 and 4-1BB ligand in cytokine production by CD28+ and CD28- T cells. *J Immunol.* 1997; 158(7):3081-3089.(Biology)

DeBenedette MA, Shahinian A, Mak TW, Watts TH. Costimulation of CD28- T lymphocytes by 4-1BB ligand. *J Immunol.* 1997; 158(2):551-559.(Biology)

Melero I, Bach N, Hellström KE, Aruffo A, Mittler RS, Chen L. Amplification of tumor immunity by gene transfer of the co-stimulatory 4-1BB ligand: synergy with the CD28 co-stimulatory pathway. *Eur J Immunol.* 1998; 28(3):1116-1121.(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)