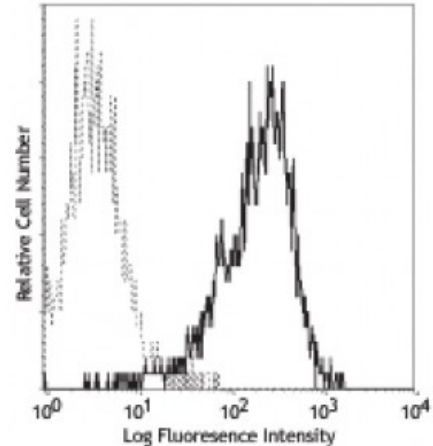


Purified anti-human 4-1BB Ligand (CD137L)

Catalog # / Size: 2157510 / 100 µg
Clone: 5F4
Isotype: Mouse IgG1, κ
Reactivity: Human
Preparation: The antibody was purified by affinity chromatography.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration: 0.5



HuT 78 (T lymphoma cell line) stained with purified 5F4, then detected with biotinylated anti-mouse IgG followed by Sav-PE

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤2.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: For most successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 311504) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated anti-mouse IgG second step (Cat. No. 405303), followed by SAV-PE (Cat. No. 405204)).

Application References: 1. Gullo C, *et al.* 2010. *PLoS One*. 5:e10845. (FC) [PubMed](#)

Description: 4-1BB ligand, also known as CDw137L, is a 97 kD member of the TNF superfamily mainly expressed on APCs, activated B and T cells. It has been reported to be important in T cell proliferation and cytokine production through interaction with 4-1BB receptor. 4-1BB ligand appears to be able to act as a costimulatory molecule without the engagement of other costimulatory molecules such as CD28.

Antigen References: 1. Akiba H, *et al.* 2000. *J. Exp. Med.* 191:375.
2. Pollak KE, *et al.* 1995. *Eur. J. Immunol.* 25:488.
3. DeBenedette MA, *et al.* 1997. *J. Immunol.* 158:551.
4. Goodwin RG, *et al.*