full spectrum cell analysis®
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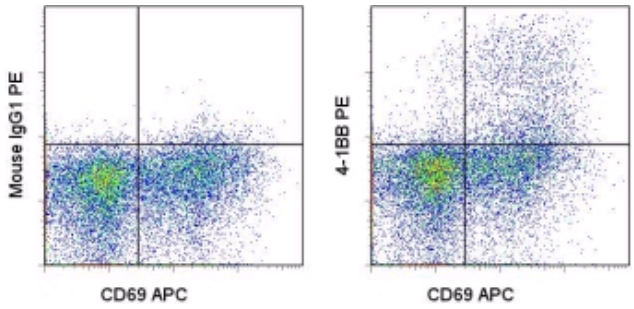
Anti-Human CD137 (4-1BB) PE

Catalog Number: 12-1379
Also Known As: 41BB, Ly-63, TNFRSF9, ILA
RUO: For Research Use Only



Staining of 2-day ConA-stimulated normal human peripheral blood cells with Anti-Human CD69 APC (cat. 17-0699) and Mouse IgG1 κ Isotype Control PE (cat. 12-4714) (left) or Anti-Human CD137 (4-1BB) PE (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Human CD137 (4-1BB) PE
REF Catalog Number: 12-1379
Clone: 4B4 (4B4-1)
Concentration: 5 µL (0.5 µg)/test
Host/Isotype: Mouse IgG1, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.
LOT Batch Code: Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

This 4B4 (4B4-1) monoclonal antibody reacts with human CD137 (also known as 4-1BB or TNFRSF9), which is an inducible member of the TNFR family of costimulatory molecules expressed on T cells, natural killer cells, dendritic cells, granulocytes, and mast cells. Involved in recruiting TNFR-associated factors (TRAF) 1 and 2, CD137 signaling plays a role in T cell activation, maintaining the survival of activated and CD8 memory T cells, as well as suppressing myelopoiesis and dendritic cell development. Stimulation of this receptor has also been shown to promote expansion of CD4+CD25+ T regulatory cells *ex vivo*. The ligand for CD137, 4-1BBL, is found on activated macrophages, mature B cells, hematopoietic stem cells, and myeloid progenitor cells.

Applications Reported

This 4B4 (4B4-1) antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 4B4 (4B4-1) antibody has been tested by flow cytometric analysis on two-day ConA-stimulated normal human peripheral blood cells. This can be used at 5 µL (0.5 µg)/per test. A test is defined as the amount (µg)/test 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 10^5 to 10^8 cells/test.

References

Lee SW, Park Y, So T, Kwon BS, Cheroutre H, Mittler RS, Croft M.Identification of regulatory functions for 4-1BB and 4-1BBL in myelopoiesis and the development of dendritic cells. Nat Immunol. 2008 Aug;9(8):917-26.

Sabbagh L, Pulle G, Liu Y, Tsitsikov EN, Watts TH. ERK-dependent Bim modulation downstream of the 4-1BB-TRAF1 signaling axis is a critical mediator of CD8 T cell survival in vivo. J Immunol. 2008 Jun 15;180(12):8093-101.

Elpek KG, Yolcu ES, Franke DD, Lacelle C, Schabowsky RH, Shirwan H.Ex vivo expansion of CD4+CD25+FoxP3+ T regulatory cells based on synergy between IL-2 and 4-1BB signaling. J Immunol. 2007 Dec 1;179(11):7295-304.

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 Apr 10;169(1):91-8.

Related Products

12-4714 Mouse IgG1 K Isotype Control PE
17-0699 Anti-Human CD69 APC (FN50)

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