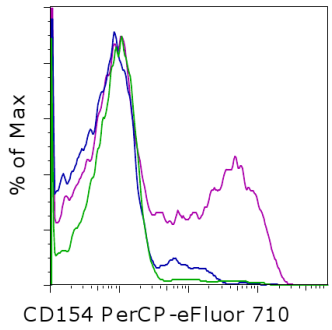
Anti-Mouse CD154 (CD40 Ligand) PerCP-eFluor® 710

Catalog Number: 46-1541
Also known as: CD40L
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of PMA/ionomycin-stimulated BALB/c T cells with 0.06 ug of Armenian Hamster IgG Isotype Control PerCP-eFluor® 710 (cat. 46-4888) (blue histogram) or 0.06 ug of Anti-Mouse CD154 (CD40 Ligand) PerCP-eFluor® 710 (purple histogram). Unstimulated BALB/c T cells stained with Anti-Mouse CD154 (CD40L) PerCP-eFluor® 710 is shown by the green histogram. Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD154 (CD40 Ligand) PerCP-eFluor® 710
REF **Catalog Number:** 46-1541
Clone: MR1
Concentration: 0.2 mg/mL
Host/Isotype: Armenian Hamster IgG

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

Description

The MR1 monoclonal antibody reacts with mouse CD154, a 39 kDa transmembrane glycoprotein also known as gp39 and CD40 ligand (CD40L). gp39 is expressed transiently by activated T cells and through its binding to CD40 on antigen presenting cells including B cells, monocytes/macrophages and dendritic cells, serves a crucial function in T-APC cognate interaction. gp39 interaction with CD40 transduces signals for T-dependent B cell activation and induces B cell cycle entry.

For staining for flow cytometric analysis, it is important to stimulate enriched T cells or enriched CD4 cells (using depletion strategy) prior to staining with MR1.

Applications Reported

This MR1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This MR1 antibody has been tested by flow cytometric analysis of stimulated mouse splenocytes. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

Click here or contact eBioscience Technical Support for more information on eFluor™ Organic Dyes including PerCP-

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eFluor® 710.

References

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Van den Eertwegh AJ, Noelle RJ, Roy M, Shepherd DM, Aruffo A, Ledbetter JA, Boersma WJ, Claassen E. In vivo CD40-gp39 interactions are essential for thymus-dependent humoral immunity. I. In vivo expression of CD40 ligand, cytokines, and antibody production delineates sites of cognate T-B cell interactions. J Exp Med. 1993 Nov 1;178(5):1555-65.

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Noelle RJ, Roy M, Shepherd DM, Stamenkovic I, Ledbetter JA, Aruffo A. A 39-kDa protein on activated helper T cells binds CD40 and transduces the signal for cognate activation of B cells. Proc Natl Acad Sci U S A. 1992 Jul 15;89(14):6550-4.

Related Products

46-4888 Armenian Hamster IgG Isotype Control PerCP-eFluor® 710 (eBio299Arm)

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