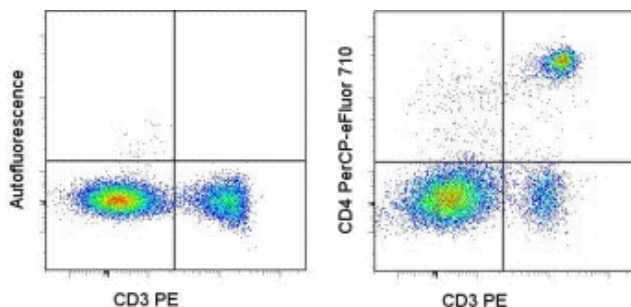


Anti-Mouse CD4 PerCP-eFluor® 710

Catalog Number: 46-0042

Also Known As: L3T4, Ly-4

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57BL/6 splenocytes with Anti-Mouse CD3e PE (cat. 12-0031) and staining buffer (autofluorescence) (left) or 0.06 µg of Anti-Mouse CD4 PerCP-eFluor® 710 (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Mouse CD4 PerCP-eFluor® 710

REF **Catalog Number:** 46-0042

Clone: RM4-5

Concentration: 0.2 mg/mL

Host/Isotype: Rat IgG2a, kappa

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.

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Contains sodium azide**

Description

The RM4-5 monoclonal antibody reacts with the mouse CD4 molecule, a 55 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells and dendritic cells. CD4 binds to MHC class II on the surface of antigen presenting cells and plays an important role both in T cell development and in optimal functioning of mature T cells. In T cells, CD4 associates with protein tyrosine kinase p56lck through its cytoplasmic tail. Binding of RM4-5 is blocked by GK1.5.

Applications Reported

This RM4-5 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This RM4-5 antibody has been tested by flow cytometric analysis of mouse spleen cells. 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 10⁵ to 10⁸ 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.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

References

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Irie J, Wu Y, Wicker LS, Rainbow D, Nalesnik MA, Hirsch R, Peterson LB, Leung PS, Cheng C, Mackay IR, Gershwin ME, Ridgway WM. NOD.c3c4 congenic mice develop autoimmune biliary disease that serologically and pathogenetically models human primary biliary cirrhosis. J Exp Med. 2006 May 15;203(5):1209-19. (RM4-5, IHC frozen, PubMed)

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Shi Y, Kaliyaperumal A, Lu L, Southwood S, Sette A, Michaels MA, Datta SK. Promiscuous presentation and recognition of nucleosomal autoepitopes in lupus: role of autoimmune T cell receptor alpha chain. J Exp Med. 1998 Feb 2;187(3):367-78. (RM4-5, FA)

Wilde DB, Marrack P, Kappler J, Dialynas DP, Fitch FW. Evidence implicating L3T4 in class II MHC antigen reactivity; monoclonal antibody GK1.5 (anti-L3T4a) blocks class II MHC antigen-specific proliferation, release of lymphokines, and binding by cloned murine helper T lymphocyte lines. J Immunol. 1983 Nov;131(5):2178-83.

Related Products

12-0031 Anti-Mouse CD3e PE (145-2C11)

17-0031 Anti-Mouse CD3e APC (145-2C11)

46-4321 Rat IgG2a K Isotype Control PerCP-eFluor® 710 (eBR2a)

48-0081 Anti-Mouse CD8a eFluor® 450 (53-6.7)

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