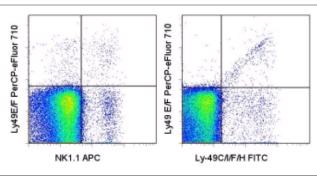


# Anti-Mouse Ly-49E/F PerCP-eFluor® 710

Catalog Number: 46-5848

Also Known As:Ly49E/F, Ly49E, Ly49F

RUO: For Research Use Only



Staining of C57BL/6 splenocytes with Anti-Mouse NK1.1 APC (cat. 17-5941) (left) or Anti-Mouse Ly-49C/I/F/H FITC (cat. 11-5991) (right) and 0.25  $\mu$ g of Anti-Mouse Ly-49E/F PerCP-eFluor® 710. Total viable cells were used for analysis.

#### **Product Information**

Contents: Anti-Mouse Ly-49E/F PerCP-eFluor® 710

REF Catalog Number: 46-5848

Clone: CM4

Concentration: 0.2 mg/mL Host/Isotype: Rat IgG2a 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

#### Description

This CM4 monoclonal antibody reacts with a subset of mouse Ly49 receptors, specifically Ly49E and Ly49F. The Ly49 family of receptors are clustered in the Natural Killer Cell complex on chromosome 6. Expression is confined to NK cell, lymphocytes that play a key role in protection from infection and malignant diseases as well as graft rejection and autoimmune diseases. Ly49E is unique from other family members in that it contains an ITIM (immunoreceptor tyrosine-based inhibitory motif) domain and is expressed on all mouse strains. Developmentally Ly49E is one of the first markers detected on NK cells but expression decreases after birth to about 1% of NK cells in the adult spleen. Upon stimulation, expression can again be induced on Ly49E negative cells. The CM4 antibody is a useful reagent for the characterization of Ly49E expression when used in combination with other Ly49 antibodies such as 14B11 (Ly49C/I/F/H), 3D10 (Ly49C), YLI-90 (Ly49I), and A1 (Ly49A).

## **Applications Reported**

This CM4 antibody has been reported for use in flow cytometric analysis.

#### **Applications Tested**

This CM4 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5  $\mu$ g per test. A test is defined as the amount (ug) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> 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-eFluor® 710.

## References

Gays F, Martin K, Kenefeck R, Aust JG, Brooks CG. Multiple cytokines regulate the NK gene complex-encoded receptor repertoire of mature NK cells and T cells. J Immunol. 2005 Sep 1;175(5):2938-47. (CM4, FC, PubMed)

Stevenaert F, Van Beneden K, De Creus A, Debacker V, Plum J, Leclercq G. Ly49E expression points toward overlapping, but distinct, natural killer (NK) cell differentiation kinetics and potential of fetal versus adult lymphoid progenitors. J Leukoc Biol. 2003 Jun;73(6):731-8.

Van Beneden K, De Creus A, Stevenaert F, Debacker V, Plum J, Leclercq G. Expression of inhibitory receptors Ly49E and CD94/NKG2 on fetal thymic and adult epidermal TCR V gamma 3 lymphocytes. J Immunol. 2002 Apr 1;168(7):3295-302.

**Related Products** 

46-4321 Rat IgG2a K Isotype Control PerCP-eFluor® 710 (PE-Cy5.5 replacement)

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