

**PE anti-mouse CD197 (CCR7)**

**Catalog # / Size:** 1200525 / 50 µg  
1200530 / 200 µg

**Clone:** 4B12

**Isotype:** Rat IgG2a, κ

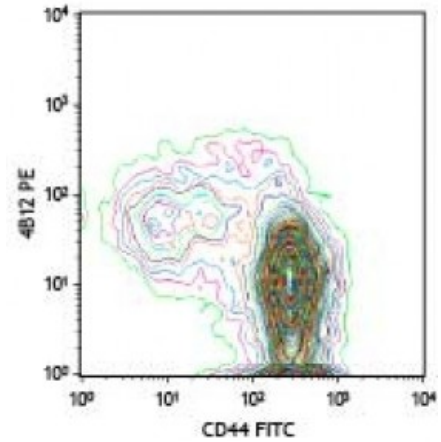
**Immunogen:** Mouse CCR7 transfected RBL-2H3 cells

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2



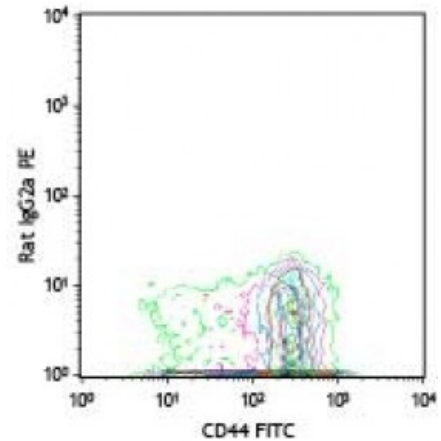
C57BL/6 splenocytes stained with CCR7-PE (clone 4B12) and CD44-FITC (gated on CD3<sup>+</sup> cell population)

**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 10<sup>6</sup> cells in 100 microL staining volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** The 4B12 antibody does not inhibit binding of ligand to receptor. Additional reported applications (for the relevant formats) include: immunoprecipitation. To reduce non-specific binding to cells bearing Fc-receptors, pre-incubation of cells with anti-mouse CD16/CD32, clone 93 (Cat. No. 101301/101302) is recommended prior to immunofluorescent staining.



C57BL/6 splenocytes stained with rat IgG2a-PE (control) and CD44-FITC (gated on CD3<sup>+</sup> cell population)

**Staining with clone 4B12 is recommended at 37°C** ([see supplemental data of PE staining at differing temperatures](#)).

- Application References:**
- Ohl L, *et al.* 2004. *Immunity* 21:279.
  - Ritter U, *et al.* 2004. *J. Leukocyte Biol.* 76:472.
  - Lan YY, *et al.* 2005. *Am. J. Transplant.* 5:2649. (FC)
  - Lee JH, *et al.* 2007. *J. Immunol.* 178:301. (FC) [PubMed](#)
  - Kurooka M and Kaneda Y. 2007. *Cancer Res.* 67:227. (FC) [PubMed](#)
  - Thompson BD. 2007. *J. Biol. Chem.* 282:9547. (FC)
  - Sakai N, *et al.* 2006. *P. Natl. Acad. Sci. USA* 103:14098. (FC)

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  9. Hwang IY, *et al.* 2007. *J. Immunol.* 179:439. (FC) [PubMed](#)
  10. Kang SG, *et al.* 2007. *J. Immunol.* 179:3724.
  11. Mao A *et al.* 2005. *J. Immunol.* 175:5146. [PubMed](#)
  12. Allende ML, *et al.* 2008. *FASEB J.* 22:307. [PubMed](#)
  13. Kang SG, *et al.* 2007. *J. Immunol.* 179:3724. [PubMed](#)
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  15. Florido M, *et al.* 2009. *Immunobiology.* 214:643. [PubMed](#)
  16. Bankoti J, *et al.* 2010. *Toxicol. Sci.* 115:422. (FC) [PubMed](#)
  17. del Rio ML, *et al.* 2011. *Transpl. Int.* 24:501. (FC) [PubMed](#)
  18. Schilling B, *et al.* 2014. *Ann Oncol.* 25:747. [PubMed](#)
  19. Nagaoka M, *et al.* 2014. *J Immunol.* 193:2812. [PubMed](#)
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**Description:** CD197 is also known as C-C chemokine receptor 7 (CCR7) or EBI-1. CCR7 is a G-coupled rhodopsin-like member of the GPCR superfamily with a predicted molecular weight of 43 kD that is expressed on hematopoietic stem cells, most naive T cells, some memory T cells, B subset, and mature dendritic cells. CCR7 is a receptor for the chemokines CCL19 (MIP3  $\beta$ ) and SLC (6CKine, Exodus-2, TCA-4, CCL21) that plays a role in thymocytes development, T cell adhesion at intestinal sites, the homeostatic recirculation of memory T cells, and chemotaxis.

- Antigen**
- References:**
1. Schweickart VL, *et al.* 1994. *Genomics* 23:643.
  2. Yoshida R, *et al.* 1998. *J. Biol. Chem.* 273:7118.
  3. Campbell JJ, *et al.* 1998. *J. Cell Biol.* 141:1053.
  4. Willmann K, *et al.*