Product Data Sheet

APC anti-mouse CD197 (CCR7)

Catalog # / Size: 1200540 / 100 μg

1200535 / 25 μg

Clone: 4B12

Isotype: Rat IgG2a, κ

Immunogen: Mouse CCR7 transfected RBL-2H3 cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity

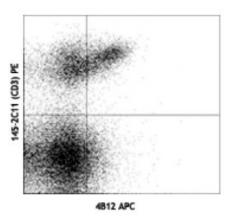
chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



C57BL/6 splenocytes stained with 4B12 APC and 145-2C11 (CD3) PE

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 10^6 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.

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

Application References:

- 1. Ohl L, et al. 2004. Immunity 21:279.
- 2. Ritter U, et al. 2004. J. Leukocyte Biol. 76:472.
- 3. Lan YY, et al. 2005. Am. J. Transplant. 5:2649. (FC)
- 4. Lee JH, et al. 2007. J. Immunol. 178:301. (FC) PubMed
- 5. Kurooka M and Kaneda Y. 2007. Cancer Res. 67:227. (FC) PubMed
- 6. Thompson BD. 2007. J. Biol. Chem. 282:9547. (FC)
- 7. Sakai N, et al. 2006. P. Natl. Acad. Sci. USA 103:14098. (FC)
- 8. Turnquist HR, et al. 2007. J. Immunol. 178:7018. (FC)
- 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. <u>PubMed</u>
- 12. Allende ML, et al. 2008. FASEB J. 22:307. PubMed
- 13. Kang SG, et al. 2007. J. Immunol. 179:3724. PubMed
- 14. Chen H, et al. 2005. J. Immunol. 175:591. PubMed
- 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. Macdonald KP, et al. 2014. J. Immunol. 192:3180. PubMed

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 β) 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. Willimann K, et al.