SONY

Product Data Sheet

APC anti-mouse CD194 (CCR4)

Catalog # / Size: 1256060 / 100 µg
1256055 / 25 µg

Clone: 2G12

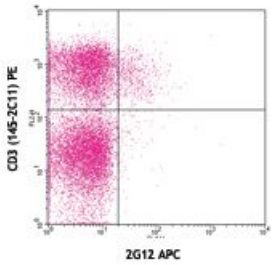
Isotype: Hamster IgG

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions.

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

Concentration: 0.2



Hyper-immunized BALB/c splenocytes stained with 145-2C11 (CD3) PE and 2G12 APC

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 ≤ 1.0 µg per 10^6 cells in 100 µl volume.

Application References:

1. Saito K, *et al.* 2008. *J. Immunol.* 181:6889. PubMed
2. Ueha S, *et al.* 2007. *J. Leukoc. Biol.* 82:1230. PubMed
3. 3. Sharma R, *et al.* 2009 *J. Immunol*. 183:1065 (FC) PubMed
4. Dogan R, *et al.* 2011. *J. Leukoc. Biol.* 89:93. PubMed
5. Liu H, *et al.* 2011. *Sci Transl Med.* 3:82. PubMed.
6. Shankar SP, *et al.* 2012. *J Immunol.* 188:6347. PubMed.

Description: Mouse CCR4 cDNA contains 1531 bp, and encodes a protein of 360 amino acids that is 85% identical to human CCR4. CCR4 binds CCL17 (TARG) and CCL22 (MDC). Naï ve T cells, bearing receptors for cutaneous antigens, become activated in skin-draining lymph nodes and express cutaneous lymphocyte antigen (CLA), which confers to these cells the capacity to migrate into the skin to exert their normal effector functions (1). CCR4 and CCR10 play an important role in the ligand-mediated recruitment of T cells into the skin in mice and humans, specifically with regards to tethering, firm adhesion, and subsequent extravasation to the site of injury (2,3). CCR4 is expressed in cutaneous regulatory T cells (Tregs). These cells are crucial for the induction and maintenance of self-tolerance and are present in peripheral tissues such as skin and gut under normal, noninflamed conditions (4).In addition, recruitment of Foxp3+ T regulatory cells mediating allograft tolerance depends on the CCR4 chemokine receptor and its ligand CCL22 (5).

Antigen References:

1. Biederman T, *et al.* 2002. *Eur. J. Immun*. 32:3171.
2. Mirshahpanah P, *et al.* 2008. *Exp. Dermatol.* 17:30.
3. Kusumoto M, *et al.* 2007. *J. Interferon Cytokine Res* 27:901.
4. Clark RA and Kupper TS. 2006. Blood 109:194.
5. Lee I, *et al.* 2005. *J. Exp. Med*. 201:1037.

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