

## Biotin anti-mouse CD194 (CCR4)

**Catalog # / Size:** 131215 / 25 µg  
131216 / 100 µg

**Clone:** 2G12

**Isotype:** Armenian Hamster IgG

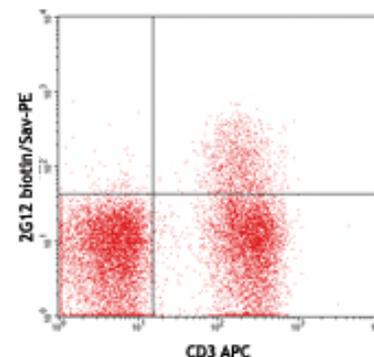
**Reactivity:** Mouse

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

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

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Hyper-immunized Balb/c splenocytes stained with CD3 APC and biotinylated 2G12, followed by Sav-PE

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**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. Sharma R, *et al.* 2009 *J. Immunol.* 183:1065 (FC) PubMed
4. Dogan R, *et al.* 2011. *J. Leukoc. Biol.* 89:93. 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). Naïve 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.

Related Products:	Product	Clone	Application
	Biotin Armenian Hamster IgG Isotype Ctrl	HTK888	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	TruStain fcX™ (anti-mouse CD16/32)	93	FC



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