## **Product Data Sheet**

## PE/Fire™ 700 anti-human CD194 (CCR4)

**Catalog #** / 2397175 / 25 tests

**Size:** 2397180 / 100 tests

Clone: L291H4

**Isotype:** Mouse IgG1, κ

Immunogen: Human CCR4 transfected cells

Reactivity: Human, Other

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with

PE/Fire™ 700 under optimal

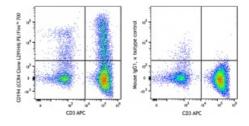
conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA)

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with anti-human CD3 APC and anti-human CD194 (CCR4) (clone L291H4) PE/Fire™ 700 (left) or mouse IgG1, κ PE/Fire™ 700 isotype control (right).

## **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 5  $\mu L$  per million cells in 100  $\mu L$  staining volume or 5  $\mu L$  per 100  $\mu L$  of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Description:** CD194, also known as CCR4, is a CC chemokine receptor. It binds CCL17 and

CCL22 and is expressed on a subset of T and B cells, basophils, monocytes, and NK cells. Human Th2 cells are characterized by the expression of CCR4

and CCR8, and these receptors are regulated differently during Th2

development. Human peripheral blood Tregs can be divided into two distinct

populations based on the expression of CCR4. Freshly isolated Tregs express CCR4 and presumably represent memory-type Tregs, and CCR4<sup>-</sup> Tregs require CD3-mediated activation to acquire a regulatory activity. Depletion of CCR4<sup>+</sup> T cells leads to Th1-type polarization of CD4<sup>+</sup> T cells and augmentation of CD8<sup>+</sup> T cell responses to tumor antigens.

CCR4 and its ligands are important for the recruitment of memory T cells

into the skin in various cutaneous immune diseases.

Antigen References:

1. Katschke KJ, et al. 2001 Arthritis Rheum. 44:1022.

2. Colantonio L, et al. 2002 Eur. J. Immunol. 32:1264.

3. Jakubzick C et al. 2004 Am. J. Pathol. 165:1211.

4. Morimoto Y, et al. 2005 J. Leukoc. Biol. 78:753.

5. Baatar J, et al. 2007 J. Immunol. 178:4891.

6. Kusumoto M, et al. 2007 J. Interferon. Cytokine Res. 27:901.