SONY

Product Data Sheet

Brilliant Violet 421™ anti-mouse CD194 (CCR4)

Catalog # / Size: 1256090 / 50 µg
1256085 / 125 µl

Clone: 2G12

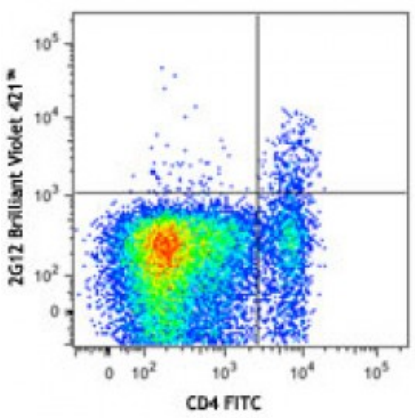
Isotype: Hamster IgG

Reactivity: Mouse

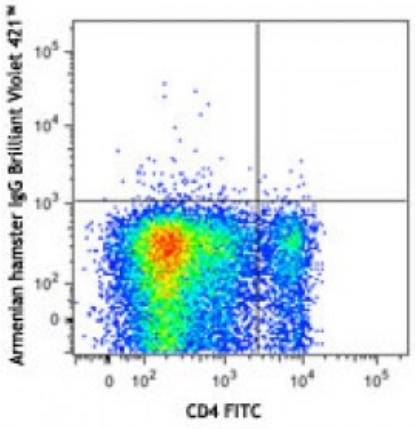
Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: NULL



Splenocytes from a 12 month old BALB/c mouse were stained with CD4 FITC and CCR4 (clone 2G12) Brilliant Violet 421™ (top) or Armenian hamster IgG Brilliant Violet 421™ isotype control (bottom).



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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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applications and foreign equivalents.

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 a