## Brilliant Violet 421™ anti-human CD197 (CCR7)

Catalog # / Size: 2366035 / 25 tests

2366040 / 100 tests

Clone: G043H7

**Isotype:** Mouse IgG2a, κ

Immunogen: CCR7-transfected cells

Reactivity: Human

**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

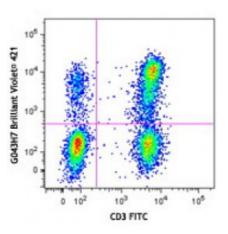
unconjugated antibody.

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

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD3 FITC and CCR7/CD197 (clone G043H7) Brilliant Violet 421™ (top) or mouse IgG2a, κ Brilliant Violet 421™ isotype control (bottom).

## **Applications:**

**Applications:** Flow Cytometry

Recommended

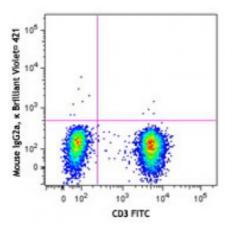
**Usage:** 

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

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**References:** 1. Neumann B, et al. 2015. J Leukoc Biol. 97:19. PubMed 2. Gerna G, et al. 2015. J Gen Virol. 96:360. PubMed

## **Description:**

CCR7, also known as CD197, is a chemokine receptor that binds CCL19 and CCL21. CCR7 and its ligands link innate and adaptive immunity by affecting interactions between T cells and dendritic cells and their downstream effect. Naïve T cells enter the lymph node through high endothelial venules, which express CCL21. Dendritic cells and macrophages enter the lymph node through afferent lymphatics. The encounter of T cells and dendritic cells in the T cell zone is CCR7-dependent. In addition, during immunological surveillance, B cells recirculate between B-cell-rich compartments (follicles or B cell zones) in secondary lymphoid organs, surveying for antigen. After antigen binding, B cells move to the boundary of B and T zones to interact with T-helper cells; this B cell migration is directed by CCR7 and its ligands. CCR7-positive cancer cell expression has been associated with lymph node metastasis.

## Antigen References:

- 1. Yanagihara S, et al. 1998. J. Immunol. 161:3096.
- 2. Charo IF, et al. 2006. N. Engl. J. Med. 354:610.
- 3. Reif K, et al. 2002. Nature 416:94.
- 4. Nakata B, et al. 2008. O