## **Brilliant Violet 605™ anti-human CD197 (CCR7)**

Catalog # / Size: 2366120 / 100 tests

2366115 / 25 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 605<sup>™</sup> under optimal conditions. The solution is free of unconjugated Brilliant Violet 605<sup>™</sup> and

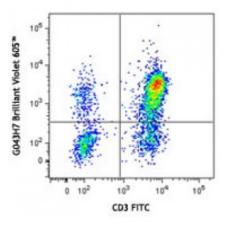
unconjugated antibody.

**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 605™.

## **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 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

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**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