

**Brilliant Violet 750™ anti-human CD197 (CCR7)**

**Catalog # / Size:** 2366265 / 25 tests  
2366270 / 100 tests

**Clone:** G043H7

**Isotype:** Mouse IgG2a, κ

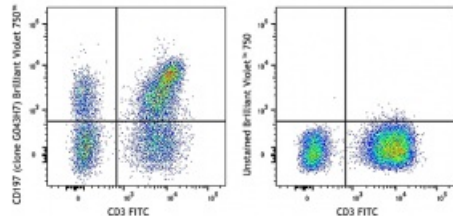
**Immunogen:** CCR7-transfected cells

**Reactivity:** Human, Non-human primate, Other

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 750™ 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 CD197 (CCR7) (clone G043H7) Brilliant Violet 750™ (left) or CD3 FITC only (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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.

Brilliant Violet 750™ excites at 405 nm and emits at 750 nm. The bandpass filter 780/60 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 750™ is a trademark of Sirigen Group Ltd.

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**Application References:**

**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. *Oncology* 74:69.
5. Brodie T. *et al.* 2013. *Cytometry A.* 6: 530-2. [PubMed](#)
6. Graves A.J. *et al.* 2014. *Cytometry A.* 7: 576-9 [PubMed](#)
7. Moncunill G. *et al.* 2014. *Cytometry A.* 12: 995-8 [PubMed](#)