SONY

Product Data Sheet

Brilliant Violet 510™ anti-human CD197 (CCR7)

Catalog # / Size: 2366155 / 25 tests
2366160 / 100 tests

Clone: G043H7

Isotype: Mouse IgG2a, κ

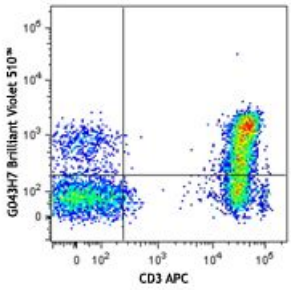
Immunogen: CCR7-transfected cells

Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions.

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

Concentration: Lot-specific



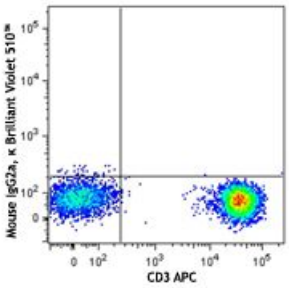
Human peripheral blood lymphocytes were stained with CD3 APC and CD197 (clone G043H7) Brilliant Violet 510™ (top) or mouse IgG2a, κ Brilliant Violet 510™ isotype control (bottom).

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

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 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 510™ 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. Naï ve 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

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