Product Data Sheet

Brilliant Violet 750™ anti-human CD197 (CCR7)

Catalog # / 2366270 / 100 tests

Size: 2366265 / 25 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.

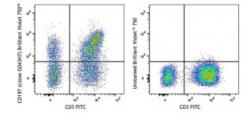
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

BSA (origin USA).

Workshop Number: **HCDM** listed

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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l 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 Notes:

Additional reported application (for the relevant formats) include: immunohistochemical staining of frozen tissue sections^{4,5,8}, immunofluorescent staining⁶, and Western blotting³.

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