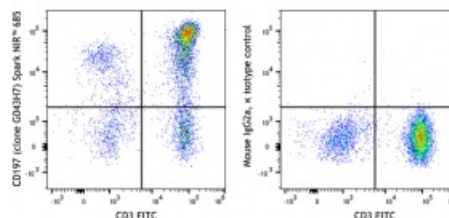


**Spark NIR™ 685 anti-human CD197 (CCR7)**

<b>Catalog # /</b>	2366290 / 100 tests
<b>Size:</b>	2366285 / 25 tests
<b>Clone:</b>	G043H7
<b>Isotype:</b>	Mouse IgG2a, κ
<b>Immunogen:</b>	CCR7-transfected cells
<b>Reactivity:</b>	Human, Non-human primate, Other
<b>Preparation:</b>	The antibody was purified by affinity chromatography and conjugated with Spark NIR™ 685 under optimal conditions.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)
<b>Workshop Number:</b>	HCDM listed
<b>Concentration:</b>	Lot-specific



Human peripheral blood lymphocytes were stained with CD3 FITC and CCR7/CD197 (clone G043H7) Spark NIR™ 685 (left panel) or mouse IgG2a, κ Spark NIR™ 685 isotype control (right panel).

**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. It is recommended that the reagent be titrated for optimal performance for each application.

\* Spark NIR™ 685 has a maximum excitation of 665 nm and a maximum emission of 685 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: Western blotting<sup>1</sup>, immunofluorescence<sup>2</sup>, and immunoprecipitation<sup>1</sup>.

**Application References:**

1. Hildreth JE, *et al.* 1991. *Blood* 77:121. (IP, WB)
2. Beatty WL, *et al.* 2006. *J. Cell Sci.* 119:350. (IF)

**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](#)