

**Alexa Fluor® 647 anti-human CD197 (CCR7)**

**Catalog # / Size:** 2366085 / 25 tests  
2366090 / 100 tests

**Clone:** G043H7

**Isotype:** Mouse IgG2a, κ

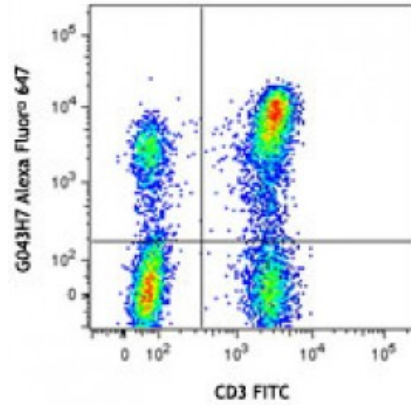
**Immunogen:** CCR7-transfected cells

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific

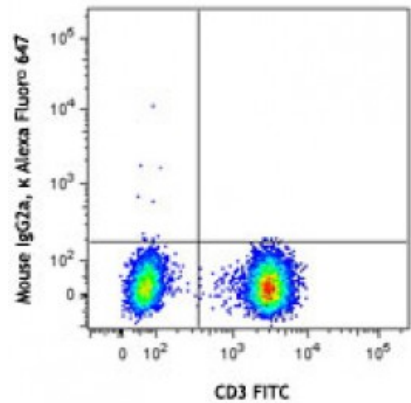


Human peripheral blood lymphocytes were stained with CD3 FITC and CD197 (clone G043H7) Alexa Fluor® 647 (top) or mouse IgG2a, κ Alexa Fluor® 647 isotype control (bottom).

**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 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.



\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

**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*