### **Product Data Sheet**

lymphocytes were stained with CD3 APC and CCR7/CD197 (clone

(left) or mouse IgG2a, κ KIRAVIA Blue 520™ isotype control (right).

G043H7) KIRAVIA Blue 520™

Human peripheral blood

#### KIRAVIA Blue 520™ anti-human CD197 (CCR7)

**Catalog #** / 2366300 / 100 tests

**Size:** 2366295 / 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 KIRAVIA Blue 520™ 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

## 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  $\mu L$  per million cells in 100  $\mu L$  staining volume or 5  $\mu L$  per 100  $\mu L$  of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* KIRAVIA Blue  $520^{\,\mathrm{TM}}$  has an excitation maximum of 495 nm, and a maximum

emission of 520 nm.

Application Notes:

This clone can suppress anti-CD3 induced T cell proliferation in vitro based

on in-house testing.

This clone has been tested in-house and determined to not be suitable for applications in immunohistochemistry of paraffin-embedded tissue sections

(IHC-P).

Additional reported applications (for the relevant formats) include:

Blocking<sup>1</sup>.

Application References:

1. Evans RL, et al. 1981. Immunol. 78:544

2. Arno A et al. 1999. J. Infect. Dis. 180:56

3. Muech M, et al. 1997. Blood 89:1364

4. Wang L, et al. 2012. Cytometry A. 81:567. PubMed

#### **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