SONY

Product Data Sheet

KIRAVIA Blue 520™ anti-human CD199 (CCR9)

Catalog # / Size: 2394630 / 100 tests
2394625 / 25 tests

Clone: L053E8

Isotype: Mouse IgG2a, κ

Immunogen: Cells transfected with human CCR9

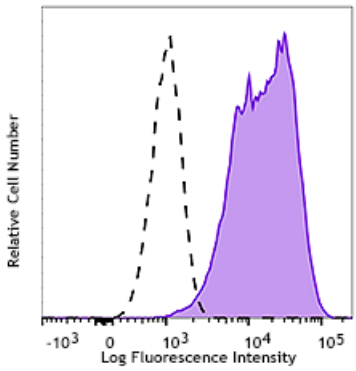
Reactivity: Human

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).

Workshop Number: VI CD86.8

Concentration: Lot-specific



Human acute lymphoblastic leukemia cell line, MOLT-4, was stained with anti-human CD199 (CCR9) (clone L053E8) KIRAVIA Blue 520™ (filled histogram) or mouse IgG2a, κ KIRAVIA Blue 520™ isotype control (open histogram).

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.

* KIRAVIA Blue 520™ has an excitation maximum of 495 nm, and a maximum emission of 520 nm.

Application Notes: Clone SE5A5 recognizes a common epitope on SIRPa (90 kD) and SIRPß (50 kD)[3]. A high degree of homology has been found between SIRP family isoforms alpha and beta at the level of extracellular domains. Consequently, many anti SIRP antibody clones, such as SE5A5, have been reported to cross react with several SIRP isoforms[1,4,5]. It reacts with CD172a and has weak cross-reaction with CD172b. This antibody is able to block the binding of SIRPa (SIRPa1 and SIRPa2) to CD47[1,6].

Application References:

1. Seiffert M, *et al.* 1999. *Blood* 94:3633.
2. Dubois NC, *et al.* 2011. *Nat. Biotechnol.* 29:1011.
3. Barros MM, *et al.* 2009. *Transfusion* 49:154.
4. Liu Y, *et al.* 2005. *J. Biol. Chem.* 280:36132.
5. Barclay AN. 2009. *Curr. Opin. Immunol.* 21:47.
6. Florian S, *et al.* 2005. *J. Leukoc. Biol.* 77:984.

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Description: Human CD199, also known as CCR9, is a member of the G protein coupled receptor family and is involved in T cell development in the thymus and in the gut-associated immune response. It is highly expressed on different stages of thymocytes and upregulated on $CD4^+$ $CD8^+$ cells. Expression of CCR9 on γ/δ T cells in the intraepithelial and small intestine has been reported. The interaction of CCR9 with its ligand CCL25 (TECK, thymus-expressed chemokine) may direct the trafficking of developing T cells in the thymus and the generation of gut-specific immunological memory.

Antigen References:

1. Zaballos A, *et al.* 1999. *J. Immunol.* 162:5671.
2. Wurbel MA, *et al.* 2007. *J. Immunol.* 178:7598.
3. Wurbel MA, *et al.* 2006. *Eur. J. Immunol.* 36:73.