

**Brilliant Violet 421™ anti-human CD210 (IL-10 R)**

**Catalog # / Size:** 2144080 / 100 tests  
2144075 / 25 tests

**Clone:** 3F9

**Isotype:** Rat IgG2a, κ

**Immunogen:** shIL-10R

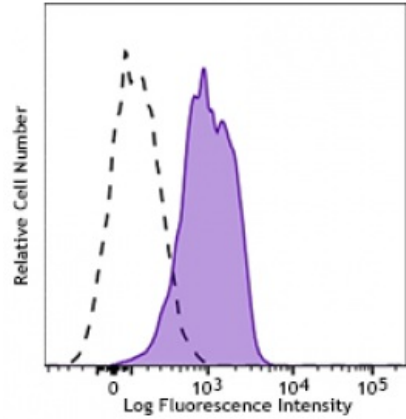
**Reactivity:** Human, Non-human primate

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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

**Workshop Number:** VII 70502

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with CD210 (clone 3F9) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ 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 or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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**Application Notes:** Clone 3F9 recognizes the IL-10-binding epitope of IL-10R1.<sup>8</sup> Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>1</sup>, *in vitro* blocking<sup>1-3</sup> of human IL-10 binding to IL-10R. For most successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 2144020) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated anti-rat IgG second step, followed by SAv-PE (Cat. No. 2626020).

**Application References:** 1. Kotenko S. 2002. *Cytokine Growth Factor Rev.* 13:223.  
2. Trinchieri G. 2003. *Nat. Rev. Immunol.* 3:133.

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**Description:** CD210, also known as the IL-10 receptor, is a 90-110 kD protein expressed on T cells, B cells, NK cells, monocytes and macrophages. CD210 belongs to the class II cytokine receptor family which includes the IFN- $\gamma$  receptor (CDw119), the IFN- $\alpha/\beta$  receptor (CD118) and tissue factor (CD142). The IL-10 receptor is involved in signal transduction by inducing phosphorylation of STAT1a and STAT3 and by inducing activation of Jak1 and Tyk.

**Antigen** 1. Kotenko S. 2002. *Cytokine Growth Factor Rev.* 13:223.  
**References:** 2. Trinchieri G. 2003. *Nat. Rev. Immunol.* 3:133.