SONY

Product Data Sheet

Brilliant Violet 421™ anti-mouse CD3Îµ

Catalog # / Size: 1101705 / 50 µg
1101675 / 125 µl

1101680 / 500 µl

Clone: 145-2C11

Isotype: Hamster IgG

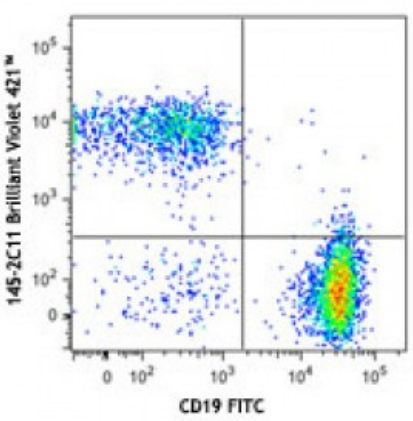
Immunogen: H-2Kb-specific mouse cytotoxic T lymphocyte clone BM10-37

Reactivity: Mouse

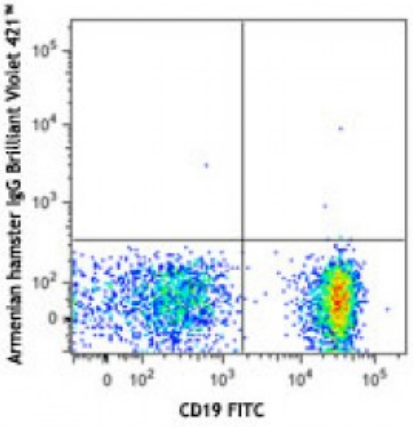
Preparation: The immunoglobulin was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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

Concentration: microg sizes: 0.2 mg/ml
microL sizes: lot-specific



C57BL/6 mouse splenocytes were stained with CD19 FITC and CD3ε (clone 145-2C11) Brilliant Violet 421™ (above) or Armenian hamster IgG Brilliant Violet 421™ isotype control (below).



Applications:

Applications: Flow Cytometry, Immunohistochemistry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining using the microg size, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. For immunofluorescent staining using the microL sizes, 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.

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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resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

Application Notes:

Clone 145-2C11 is useful for *in vitro* blocking of target-specific CTL-mediated cell lysis1, as well as T cell activation assays, inducing proliferation and cytokine production[1,2,7,12,16]. It also induces apoptosis in immature thymocytes[32], and *in vivo* T cell depletion[8-10]. Additional reported applications (for relevant formats of this clone) include: immunoprecipitation1, immunohistochemical staining[14,15] of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections, Western blotting4, complement-mediated cytotoxicity[6], *in vitro* and *in vivo* stimulation of T cells[1,2,7,12,16], immunofluorescent staining5, and *in vivo* T cell depletion8-10. The 145-2C11 antibody has been reported to block the binding of 17A2 antibody to CD3 epsilon-specific T cells[11]. Clone 145-2C11 is not recommended for formalin-fixed paraffin embedded sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 100314). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 100340) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

Application References:

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24. Kanaya T, *et al.* 2008. *Am. J. Physiol. Gastrointest. Liver Physiol.* 295:G273. PubMed

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Description: CD3ε is a 20 kD transmembrane protein, also known as CD3 or T3. It is a member of the Ig superfamily and primarily expressed on T cells, NK-T cells, and at different levels on thymocytes during T cell differentiation. CD3ε forms a TCR complex by associating with the CD3δ, γ and ζ chains, as well as the TCR α/β or γ/δ chains. CD3 plays a critical role in TCR signal transduction, T cell activation, and antigen recognition by binding the peptide/MHC antigen complex.

Antigen References:

1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
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3. Weiss A, *et al.* 1994. *Cell* 76:263.