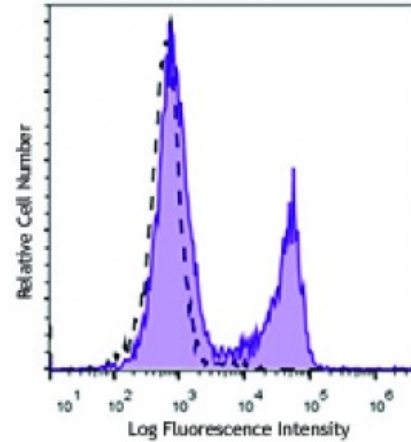


Brilliant Violet 510™ anti-mouse CD3ε

Catalog # / Size: 1101765 / 50 µg
Clone: 145-2C11
Isotype: Hamster IgG
Immunogen: H-2Kb-specific mouse cytotoxic T lymphocyte clone BM10-37
Reactivity: Mouse
Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and unconjugated antibody.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration: Lot-specific



C57BL/6 mouse splenocytes were stained with CD3ε (clone 145-2C11) Brilliant Violet 510™ (filled histogram) or Armenian hamster IgG Brilliant Violet 510™ 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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.

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 thymocytes³², and *in vivo* T cell depletion⁸⁻¹⁰. 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 cytotoxicity⁶, *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 cells¹¹. 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 1. Leo O, *et al.* 1987. *P. Natl. Acad. Sci. USA* 84:1374. (IP, Activ)

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Description: CD3 ϵ 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. CD3 ϵ forms a TCR complex by associating with the CD3 δ , 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:**
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