

**APC/Cy7 anti-mouse CD3ε**

**Catalog # / Size:** 1101645 / 25 µg  
1101650 / 100 µg

**Clone:** 145-2C11

**Isotype:** Hamster IgG

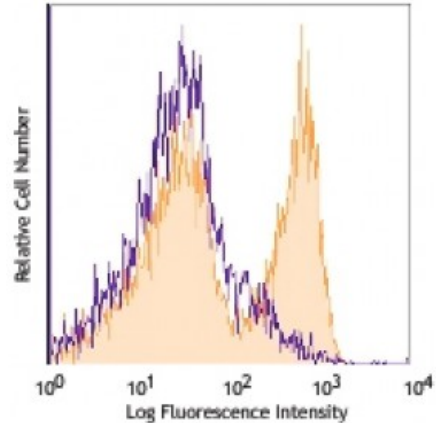
**Immunogen:** H-2Kb-specific mouse cytotoxic T lymphocyte clone BM10-37

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2



C57BL/6 mouse splenocytes were stained with CD3ε (clone 145-2C11) APC/Cy7 (filled histogram) or Armenian hamster IgG APC/Cy7 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 10<sup>6</sup> cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Clone 145-2C11 is useful for *in vitro* blocking of target-specific CTL-mediated cell lysis<sup>1</sup>, as well as T cell activation assays, inducing proliferation and cytokine production<sup>1,2,7,12,16</sup>. It also induces apoptosis in immature thymocytes<sup>32</sup>, and *in vivo* T cell depletion<sup>8-10</sup>. Additional reported applications (for relevant formats of this clone) include: immunoprecipitation<sup>1</sup>, immunohistochemical staining<sup>14,15</sup> of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections, Western blotting<sup>4</sup>, complement-mediated cytotoxicity<sup>6</sup>, *in vitro* and *in vivo* stimulation of T cells<sup>1,2,7,12,16</sup>, immunofluorescent staining<sup>5</sup>, and *in vivo* T cell depletion<sup>8-10</sup>. The 145-2C11 antibody has been reported to block the binding of 17A2 antibody to CD3 epsilon-specific T cells<sup>11</sup>. 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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**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:**

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