

## Purified Anti-Mouse CD3e Antibody[500A2], Functional Grade

catalog number: AN003420

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

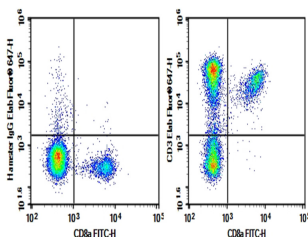
<b>Reactivity</b>	Mouse
<b>Immunogen</b>	Recombinant Mouse CD3e protein
<b>Host</b>	Syrian Hamster
<b>Isotype</b>	Syrian Hamster IgG
<b>Clone</b>	500A2
<b>Purification</b>	>98%, Protein A/G purified
<b>Buffer</b>	Sterile PBS, pH 7.2. < 1.0 EU per mg of the antibody as determined by the LAL method.

### Applications

### Recommended Dilution

<b>FCM</b>	≤ 0.2 µg per million cells in 100 µL volume
<b>Activ</b>	Reported in the literature
<b>Block</b>	Reported in the literature

### Data



C57/BL6 Mouse splenocytes were stained with 0.2 µg Purified Anti-Mouse CD3e Antibody[500A2], Functional Grade (Right) and 0.2 µg Syrian Hamster IgG, κ Isotype

Control (Left), followed by Elab Fluor® 647-conjugated Goat Anti- Syrian Hamster IgG Secondary Antibody, then anti-Mouse CD8a FITC-conjugated Monoclonal Antibody.

### Preparation & Storage

<b>Storage</b>	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles. This preparation contains no preservatives, thus it should be handled under aseptic conditions.
<b>Shipping</b>	Ice bag

### Background

#### For Research Use Only

Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways (PubMed:2470098). In addition of this role of signal transduction in T-cell activation, CD3E plays an essential role in correct T-cell development. Initiates the TCR-CD3 complex assembly by forming the two heterodimers CD3D/CD3E and CD3G/CD3E. Participates also in internalization and cell surface down-regulation of TCR-CD3 complexes via endocytosis sequences present in CD3E cytosolic region

None (Azide-Free,Low Endotoxin) are perfectly suited to be used in culture or in vivo (for nonhuman studies) for functional assays blocking, neutralizing, activation or depletion where the presence of azide may damage cells or exogenous endotoxin may signal or activate cells.