

## Anti-CD3 epsilon/Cd3e Antibody Picoband®

Catalog Number: A02765-1

### About Cd3e

CD3e molecule, epsilon also known as CD3E is a polypeptide which in humans is encoded by the CD3E gene which resides on chromosome 11. It is mapped to 11q23.3. The protein encoded by this gene is the CD3-epsilon polypeptide, which together with CD3-gamma, -delta and -zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T cell receptor-CD3 complex. This complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. The epsilon polypeptide plays an essential role in T-cell development.

### Overview

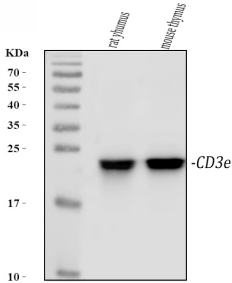
Product Name	Anti-CD3 epsilon/Cd3e Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-CD3 epsilon/Cd3e Antibody Picoband® catalog # A02765-1. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P22646

### Technical Details

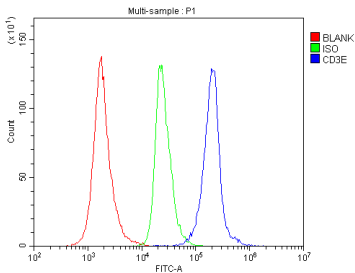
Immunogen	E.coli-derived mouse CD3 epsilon/Cd3e recombinant protein (Position: D22-A113).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.25ug/ml, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells, Mouse ELISA, 0.1-0.5ug/ml, -, Rat

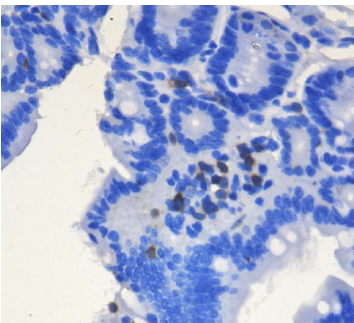
## Anti-CD3 epsilon/Cd3e Antibody Picoband® (A02765-1) Images



Western blot analysis of CD3 epsilon/Cd3e using anti-CD3 epsilon/Cd3e antibody (A02765-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat thymus tissue lysates, Lane 2: mouse thymus tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD3 epsilon/Cd3e antigen affinity purified polyclonal antibody (Catalog # A02765-1) at 0.25 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD3 epsilon/Cd3e at approximately 23 kDa. The expected band size for CD3 epsilon/Cd3e is at 21 kDa.

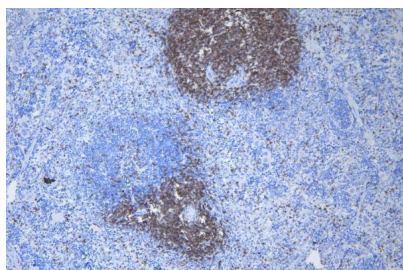


Flow Cytometry analysis of mouse spleen tissues using anti-CD3 epsilon/Cd3e antibody (A02765-1). Overlay histogram showing mouse spleen tissues stained with A02765-1 (Blue line). The tissues were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CD3 epsilon/Cd3e Antibody (A02765-1, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

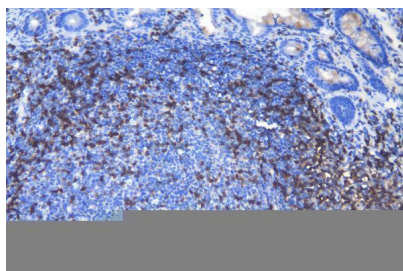


IHC analysis of CD3 epsilon/Cd3e using anti-CD3 epsilon/Cd3e antibody (A02765-1). CD3 epsilon/Cd3e was detected in a paraffin-embedded section of mouse lymph node tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD3 epsilon/Cd3e Antibody (A02765-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

IHC analysis of CD3 epsilon/Cd3e using anti-CD3 epsilon/Cd3e antibody (A02765-1). CD3 epsilon/Cd3e was detected in a paraffin-embedded section of mouse spleen



tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD3 epsilon/Cd3e Antibody (A02765-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of CD3 epsilon/Cd3e using anti-CD3 epsilon/Cd3e antibody (A02765-1). CD3 epsilon/Cd3e was detected in a paraffin-embedded section of rat lymph node tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD3 epsilon/Cd3e Antibody (A02765-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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Anti-CD3 epsilon/Cd3e Antibody

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