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Anti-CD3 Epsilon Picoband Antibody

Catalog # ABO11801

Specification

Anti-CD3 Epsilon Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P07766
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for T-cell surface glycoprotein CD3 epsilon chain(CD3E) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CD3 Epsilon Picoband Antibody - Additional Information

Gene ID 916

Other Names
T-cell surface glycoprotein CD3 epsilon chain, T-cell surface antigen T3/Leu-4 epsilon chain, CD3e, CD3E, T3E

Calculated MW
23147 MW KDa

Application Details
Immunocytochemistry , 0.5-1 µg/ml, Human, -
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Mouse, Rat, -
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Membrane; Single-pass type I membrane protein.

Protein Name
T-cell surface glycoprotein CD3 epsilon chain

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human CD3 epsilon recombinant protein (Position: D23-I207). Human CD3 epsilon shares 65% amino acid (aa) sequence identity with mouse CD3 epsilon.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage **At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Contains 1 Ig-like (immunoglobulin-like) domain.

Anti-CD3 Epsilon Picoband Antibody - Protein Information

Name CD3E

Synonyms T3E

Function
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 (PubMed:10384095, PubMed:26507128). In addition to its role as a TCR coreceptor, it serves as a receptor for ITPRIPL1. Ligand recognition inhibits T-cell activation by promoting interaction with NCK1, which prevents CD3E-ZAP70 interaction and blocks the ERK- NFkB signaling cascade and calcium influx (PubMed:38614099).

Cellular Location
Cell membrane; Single-pass type I membrane protein

Anti-CD3 Epsilon Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CD3 Epsilon Picoband Antibody - Images

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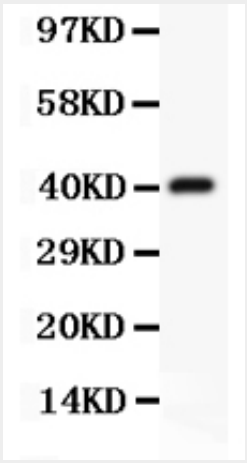
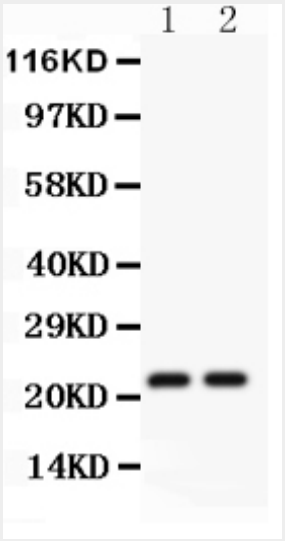


Anti-CD3 epsilon Picoband antibody, ABO11801-1.jpgAll lanes: Anti CD3 Epsilon (ABO11801) at 0.5ug/mlWB : Recombinant Human CD3epsilon Protein 0.5ng Predicted bind size: 40KDObserved bind size: 40KD



Anti-CD3 epsilon Picoband antibody, ABO11801-2.jpgAll lanes: Anti CD3 Epsilon (ABO11801) at 0.5ug/mlLane 1: JURKAT Whole Cell Lysate at 40ugLane 2: CEM Whole Cell Lysate at 40ugPredicted bind size: 23KDObserved bind size: 23KD

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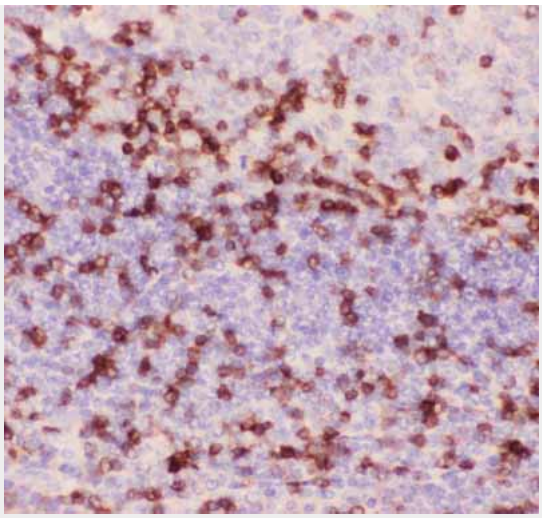
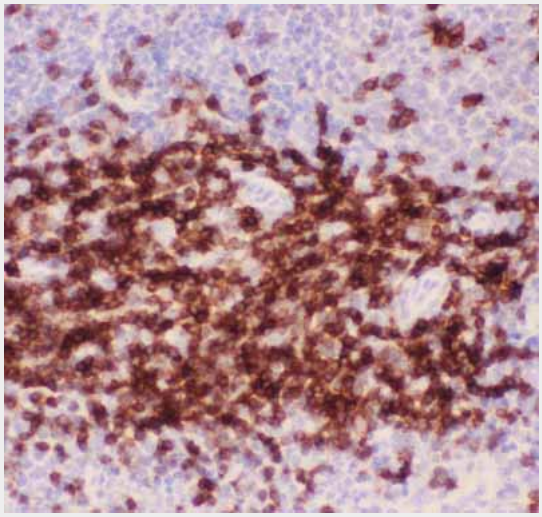
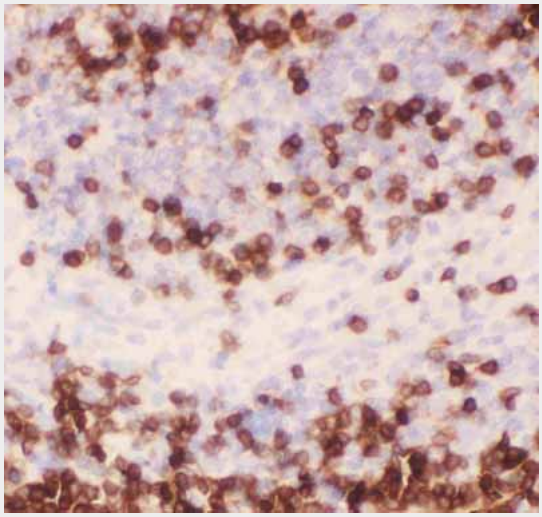


Anti-CD3 epsilon Picoband antibody, ABO11801-3.JPGIHC(P): Human Tonsil Tissue



Anti-CD3 epsilon Picoband antibody, ABO11801-4.JPGIHC(P): Mouse Spleen Tissue



Anti-CD3 epsilon Picoband antibody, ABO11801-5.JPGIHC(P): Rat Spleen Tissue

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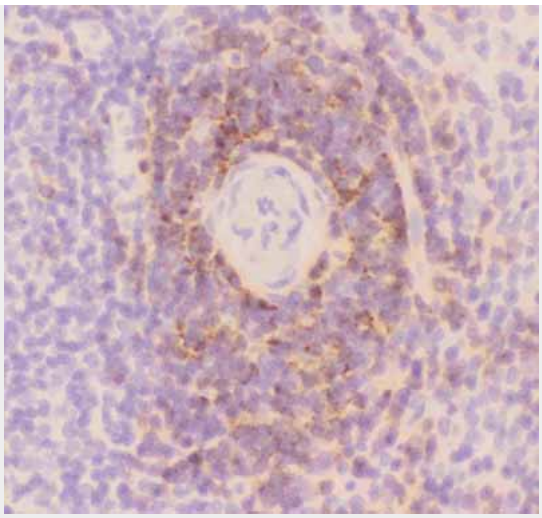
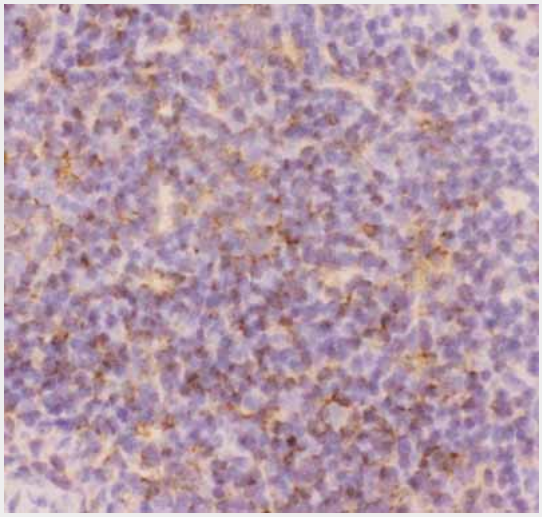


Anti-CD3 epsilon Picoband antibody, pb9093-6.JPGIHC(F): Rat Spleen Tissue



Anti-CD3 epsilon Picoband antibody, pb9093-7.JPGIHC(F): Mouse Spleen Tissue

Anti-CD3 Epsilon Picoband Antibody - Background

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.