abcam

Product datasheet

Anti-CD3 epsilon antibody [EP449E] ab52959



★★★★★ 3 Abreviews 15 References 9 Images

Overview

Product name Anti-CD3 epsilon antibody [EP449E]

Description Rabbit monoclonal [EP449E] to CD3 epsilon

Host species Rabbit

Specificity This antibody reacts with CD3 epsilon. It does not cross-react with other subunits of CD3.

Tested applications Suitable for: WB, IHC-P, IP

Reacts with: Human Species reactivity

Immunogen Synthetic peptide corresponding to Human CD3 epsilon aa 150-250. Derived from the

> cytoplasmic domain. Database link: P07766

Positive control Jurkat cell lysate and human spleen tissue. IP: Jurkat whole cell lysate.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

1

Purity Protein A purified

Clonality Monoclonal
Clone number EP449E

Isotype IgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab52959 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	****(1)	1/1000 - 1/10000. Detects a band of approximately 23 kDa (predicted molecular weight: 23 kDa).
IHC-P	**** <u>(2)</u>	1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		1/20.

Target

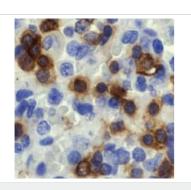
Function The CD3 complex mediates signal transduction.

Sequence similarities Contains 1 lg-like (immunoglobulin-like) domain.

Contains 1 ITAM domain.

Cellular localization Membrane.

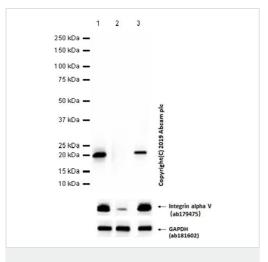
Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD3 epsilon antibody
[EP449E] (ab52959)

ab52959 at 1/250-1/500 dilution staining CD3 epsilon in human spleen by Immunohistochemistry, Paraffin embedded tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-CD3 epsilon antibody [EP449E] (ab52959)

All lanes : Anti-CD3 epsilon antibody [EP449E] (ab52959) at 1/1000 dilution (purified)

Lane 1: Jurkat(Human T cell leukemia T lymphocyte)membrane fraction cell lysate

Lane 2: Jurkat (Human T cell leukemia T lymphocyte) without membrane fraction cell lysate

Lane 3 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

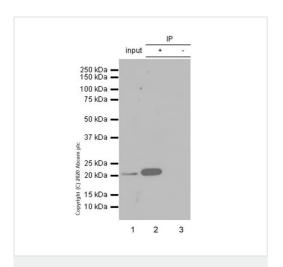
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 23 kDa Observed band size: 23 kDa

Exposure time: 20 seconds

Blocking/Dilution buffer and concentration: 5% NFDM/TBST



Immunoprecipitation - Anti-CD3 epsilon antibody [EP449E] (ab52959)

Purified ab52959 at 1/20 dilution ($1\mu g$) immunoprecipitating CD3 epsilon in Jurkat whole cell lysate.

Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate $10\mu g$

Lane 2 (+): ab52959 + Jurkat whole cell lysate.

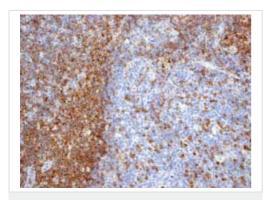
Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab52929</u> in Jurkat whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

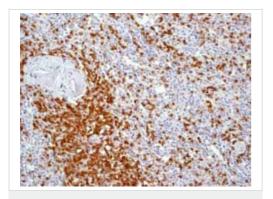
Observed band size: 23 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD3 epsilon antibody
[EP449E] (ab52959)

ab52959 showing positive staining in Normal tonsil tissue.

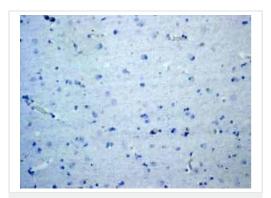
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD3 epsilon antibody
[EP449E] (ab52959)

ab52959 showing positive staining in Normal spleen tissue.

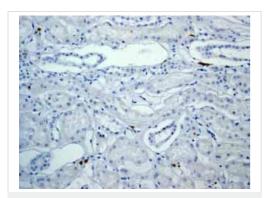
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD3 epsilon antibody
[EP449E] (ab52959)

ab52959 showing negative staining in Normal brain tissue.

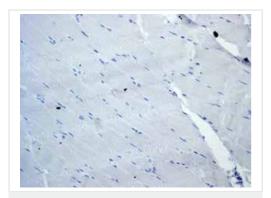
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD3 epsilon antibody
[EP449E] (ab52959)

ab52959 showing negative staining in Normal kidney tissue.

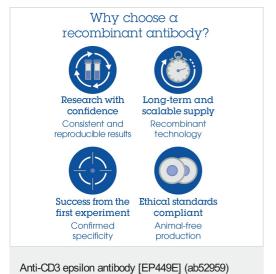
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD3 epsilon antibody
[EP449E] (ab52959)

ab52959 showing negative staining in Skeletal muscle tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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