

# CD3 epsilon Recombinant monoclonal antibody

Catalog Number: 86053-1-RR

## Basic Information

<b>Catalog Number:</b> 86053-1-RR	<b>GenBank Accession Number:</b> NP_001101610.2	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 315609	<b>CloneNo.:</b> 242849D3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> A6J423	<b>Recommended Dilutions:</b> WB: 1:2000-1:10000 IHC: 1:500-1:2000 IF-P: 1:500-1:2000
<b>Isotype:</b> IgG	<b>Full Name:</b> CD3 molecule, epsilon polypeptide	
<b>Immunogen Catalog Number:</b> EG1450	<b>Calculated MW:</b> 22kDa	
	<b>Observed MW:</b> 22 kDa	

## Applications

### Tested Applications:

WB, IF-P, ELISA

### Species Specificity:

mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB :** rat thymus tissue, CTLL-2 cells, mouse thymus tissue, rat spleen tissue

**IHC :** rat spleen tissue, rat thymus tissue

**IF-P :** rat thymus tissue, rat spleen tissue

## Background Information

CD3 is a multimeric protein associated with the T-cell receptor (TCR) to form a complex involved in antigen recognition and signal transduction (PMID: 15885124). CD3 is composed of CD3γ, δ, ε, and ζ chains (PMID: 1826255). It is expressed by thymocytes in a developmentally regulated manner, T cells, and some NK cells (PMID: 3289580). The TCR recognizes antigens bound to major histocompatibility complex (MHC) molecules. TCR-mediated peptide-MHC recognition is transmitted to the CD3 complex, leading to the intracellular signal transduction (PMID: 11985657). This antibody was raised against the epsilon chain of rat CD3 molecule.

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1% BSA**

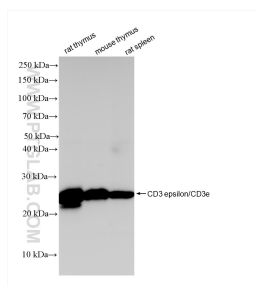
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

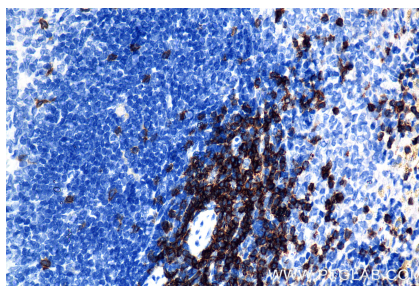
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

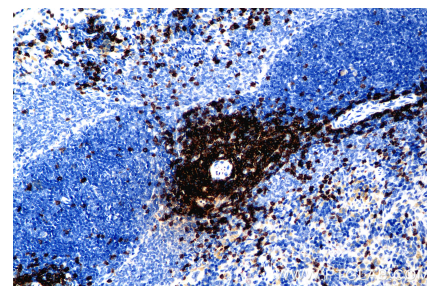
## Selected Validation Data



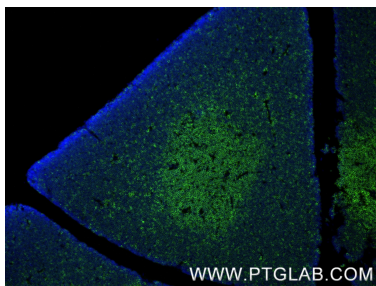
Various lysates were subjected to SDS PAGE followed by western blot with 86053-1-RR (CD3 epsilon/CD3e antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



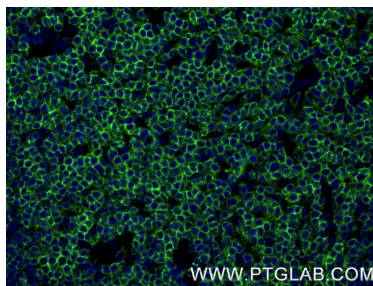
Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 86053-1-RR (CD3 epsilon antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



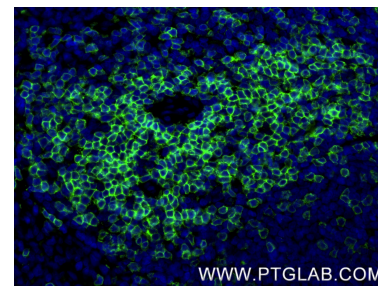
Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 86053-1-RR (CD3 epsilon antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat thymus tissue using CD3 epsilon antibody (86053-1-RR, Clone: 242849D3) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat thymus tissue using CD3 epsilon antibody (86053-1-RR, Clone: 242849D3) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat spleen tissue using CD3 epsilon antibody (86053-1-RR, Clone: 242849D3) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).