

For Research Use Only

# Rat CD3 epsilon Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 86053-1-PBS



## Basic Information

Catalog Number:	86053-1-PBS	GenBank Accession Number:	NP_001101610.2	Purification Method:
Source:	Rabbit	GenID (NCBI):	315609	CloneNo.:
Isotype:	IgG	UNIPROT ID:	A61423	242849D3
Immunogen Catalog Number:	EG1450	Full Name:	CD3 molecule, epsilon polypeptide	
		Calculated MW:	22kDa	
		Observed MW:	22 kDa	

## Applications

Tested Applications:  
WB, IHC, IF-P, Sandwich ELISA, Indirect ELISA

Species Specificity:  
mouse, rat

## 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 CD3  $\gamma$ ,  $\delta$ ,  $\epsilon$ , and  $\zeta$  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 -80°C.  
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C  
Storage Buffer:  
PBS only, pH7.3

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

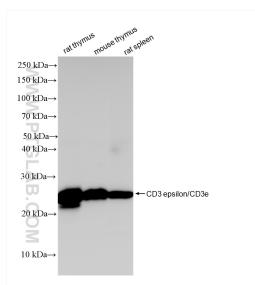
T: 4006900926

E: Proteintech-CN@ptglab.com

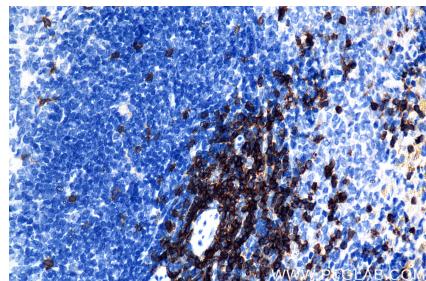
W: ptgcn.com

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

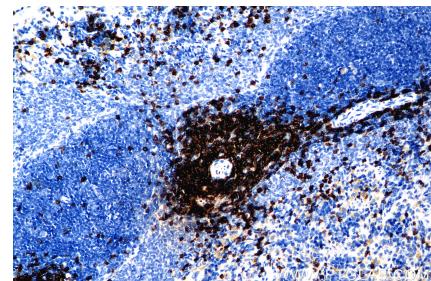
## Selected Validation Data



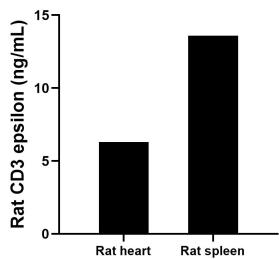
Various lysates were subjected to SDS PAGE followed by western blot with 86053-1-RR (CD3 epsilon/CD3e antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86053-1-PBS in a different storage buffer formulation.



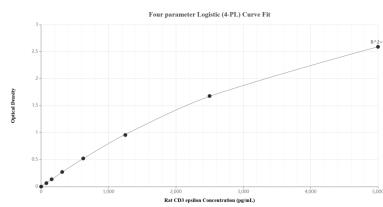
Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 86053-1-RR (CD3 epsilon antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86053-1-PBS in a different storage buffer formulation.



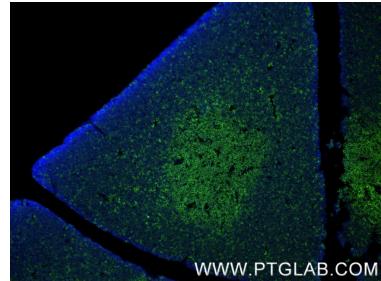
Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 86053-1-RR (CD3 epsilon antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86053-1-PBS in a different storage buffer formulation.



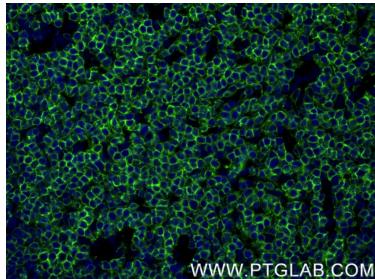
The mean CD3 epsilon concentration was determined to be 6.3 ng/mL in rat heart tissue extract based on a 6.7 mg/mL extract load and 13.6 ng/mL in rat spleen tissue extract based on a 2.7 mg/mL extract load.



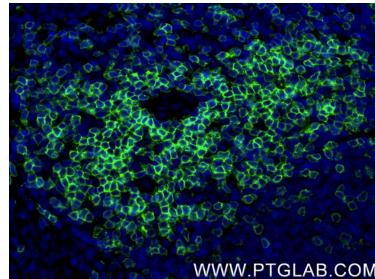
Sandwich ELISA standard curve of MP02251-2, Rat CD3 epsilon Recombinant Matched Antibody Pair - PBS only. 86053-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1450. 86053-1-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL



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). This data was developed using the same antibody clone with 86053-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 86053-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 86053-1-PBS in a different storage buffer formulation.