

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: Protein A purification
Source: Rabbit	GeneID (NCBI): 315609	CloneNo.: 242849D3
Isotype: IgG	UNIPROT ID: A6J423	
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 γ , 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

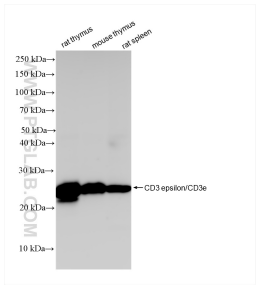
Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS only, pH7.3

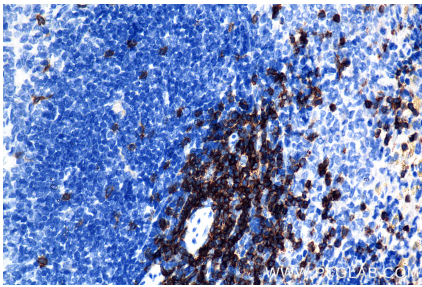
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

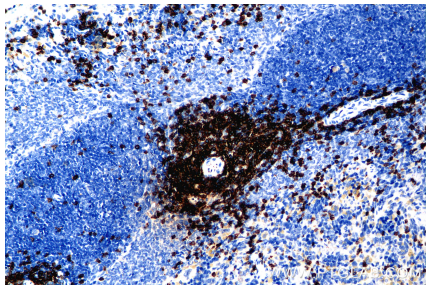
Selected Validation Data



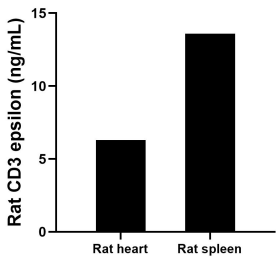
Various lysates were subjected to SDS PAGE followed by western blot with 86053-1-RR (CD3 epsilon/CD3e antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86053-1-PBS in a different storage buffer formulation.



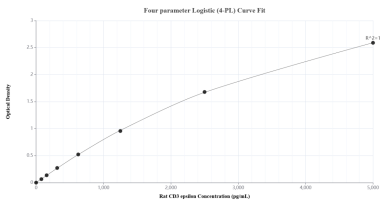
Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 86053-1-RR (CD3 epsilon antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86053-1-PBS in a different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



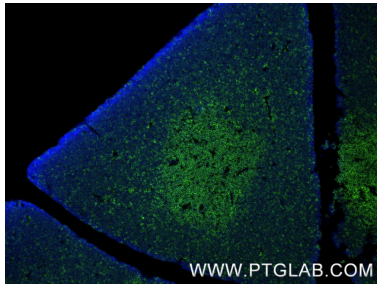
Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 86053-1-RR (CD3 epsilon antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86053-1-PBS in a different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



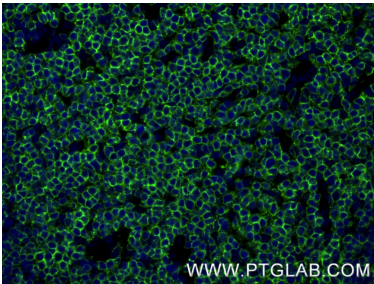
The mean CD3 epsilon concentration was determined to be 6.3 ng/mL in rat heart tissue extract based on a 6.7 mg/mL extract load and 13.6 ng/mL in rat spleen tissue extract based on a 2.7 mg/mL extract load.



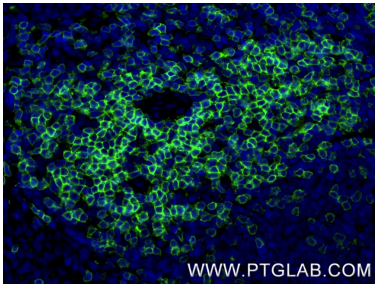
Sandwich ELISA standard curve of MP02251-2, Rat CD3 epsilon Recombinant Matched Antibody Pair - PBS only. 86053-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1450. 86053-1-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL.



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.