

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:
Size:	100ug, Concentration: 1 mg/ml by Nanodrop;	GenID (NCBI):	315609	CloneNo.:
Source:	Rabbit	UNIPROT ID:	A6J423	242849D3
Isotype:	IgG	Full Name:	CD3 molecule, epsilon polypeptide	
Immunogen Catalog Number:	EG1450	Calculated MW:	22kDa	
		Observed MW:	22 kDa	

Applications

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

Species Specificity:
mouse, rat

Product Information

86053-1-PBS targets CD3 epsilon as part of a matched antibody pair:

MPO2251-2: 86053-3-PBS capture and 86053-1-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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

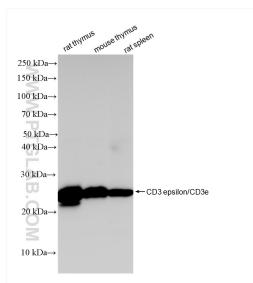
Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

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)

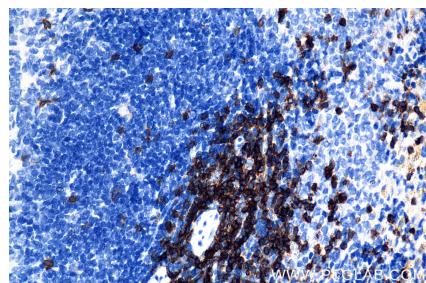
E: proteintech@ptglab.com
W: ptglab.com

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

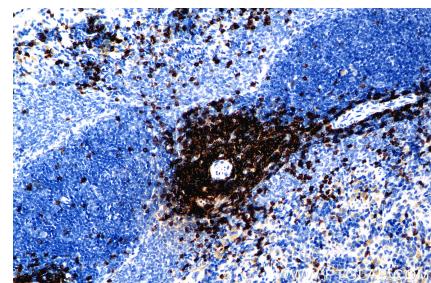
Selected Validation Data



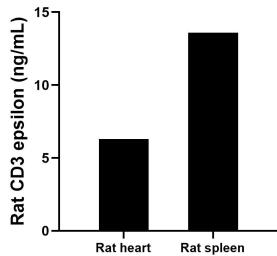
Various lysates were subjected to SDS PAGE followed by western blot with 86053-1-RR (CD3 epsilon/CD3e antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86053-1-PBS in a different storage buffer formulation.



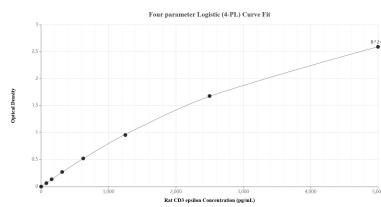
Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 86053-1-RR (CD3 epsilon antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86053-1-PBS in a different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



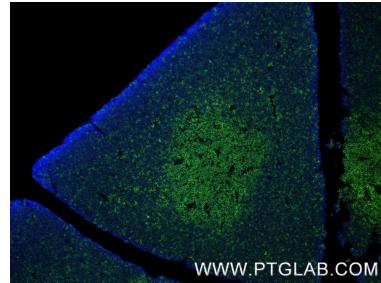
Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 86053-1-RR (CD3 epsilon antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86053-1-PBS in a different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



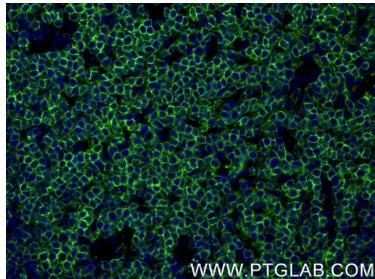
The mean CD3 epsilon concentration was determined to be 6.3 ng/mL in rat heart tissue extract based on a 6.7 mg/mL extract load and 13.6 ng/mL in rat spleen tissue extract based on a 2.7 mg/mL extract load.



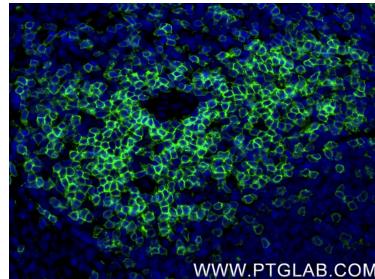
Sandwich ELISA standard curve of MP02251-2, Rat CD3 epsilon Recombinant Matched Antibody Pair - PBS only. 86053-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1450. 86053-1-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL



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.



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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.