

For Research Use Only

Rat IL-4 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 84422-5-PBS



Basic Information

Catalog Number: 84422-5-PBS	GenBank Accession Number: NM_201270.1	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 287287	CloneNo.: 241249H7
Source: Rabbit	UNIPROT ID: P20096	
Isotype: IgG	Full Name: interleukin 4	
	Calculated MW: 16kDa	

Applications

Tested Applications:
WB, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
rat

Product Information

84422-5-PBS targets IL-4 as part of a matched antibody pair:

MP01293-3: 84422-5-PBS capture and 84422-2-PBS detection (validated in Cytometric bead array)

MP01293-4: 84422-3-PBS capture and 84422-5-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

Interleukin-4 (IL-4) is a pleiotropic cytokine that plays a crucial role in regulating immune responses and mediating type-2 immune reactions. It is primarily produced by T-helper 2 (Th2) cells, mast cells, eosinophils, basophils, and other immune cells. IL-4 exerts its effects by binding to type I and type II receptors, initiating a signaling cascade that involves the phosphorylation of STAT6 and the transcription of IL-4-responsive genes. This pathway is essential for the regulation of immune cell functions and the maintenance of immune homeostasis.

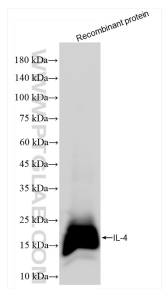
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

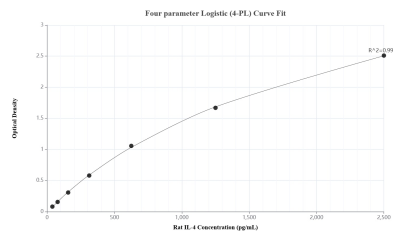
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

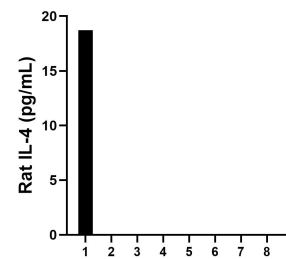
Selected Validation Data



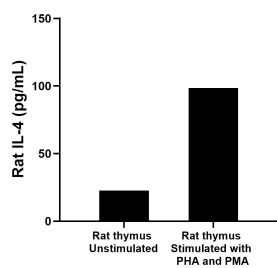
Rat IL-4 recombinant protein (Cat No. Eg113) was subjected to SDS PAGE followed by western blot with 84422-5-RR (IL-4 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84422-5-PBS in a different storage buffer formulation.



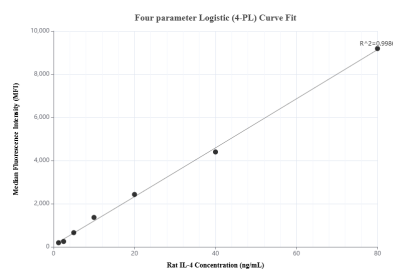
Sandwich ELISA standard curve of MP01293-4, Rat IL-4 Recombinant Matched Antibody Pair - PBS only. 84422-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1113. 84422-5-PBS was Biotin conjugated as the detection antibody. Range: 39.1-2500 pg/mL.



Serum of eight individual healthy human donors was measured. Seven measured less than the lowest rat IL-4 standard, 39.1 pg/mL. One sample read 18.7 pg/mL.



One rat thymus was cultured for 18 hours in RPMI 1640 supplemented with 10% fetal bovine serum, 50 μ M β -mercaptoethanol, 2 mM L-glutamine, and 100 μ g/mL of streptomycin sulfate. The cells were stimulated with 5 μ g/mL of PHA and 50 ng/mL of PMA for 7 days. An aliquot of the cell culture supernatant was removed, assayed for rat IL-4 and measured 98.5 pg/mL.



Cytometric bead array standard curve of MP01293-3, RAT IL-4 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84422-5-PBS. Detection antibody: 84422-2-PBS. Standard: Eg1113. Range: 1.25-80 ng/mL.