

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

Concentration:

1 mg/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_201270.1

GeneID (NCBI):

287287

UNIPROT ID:

P20096

Full Name:

interleukin 4

Calculated MW:

16kDa

Purification Method:

Protein A purification

CloneNo.:

241249H7

Applications

Tested Applications:

WB, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:

rat

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.

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

Storage Buffer:

PBS Only

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

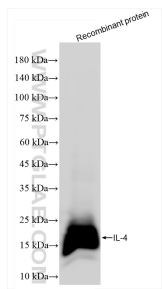
T: 4006900926

E: Proteintech-CN@ptglab.com

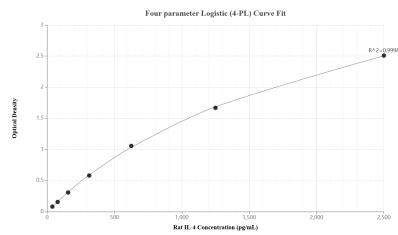
W: ptgcn.com

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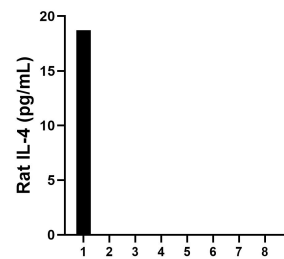
Selected Validation Data



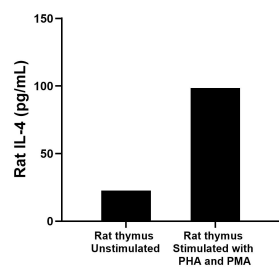
Rat IL-4 recombinant protein (Cat No. Eg113) was subjected to SDS PAGE followed by western blot with 84422-5-RR (IL-4 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84422-5-PBS in a different storage buffer formulation.



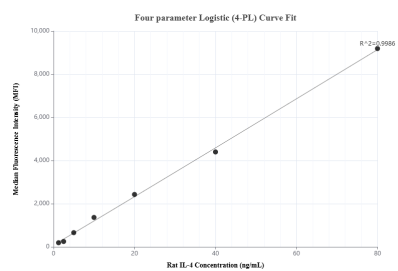
Sandwich ELISA standard curve of MP01293-4, Rat IL-4 Recombinant Matched Antibody Pair - PBS only. 84422-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1113. 84422-5-PBS was Biotin conjugated as the detection antibody. Range: 39.1-2500 pg/mL.



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.