

For Research Use Only

Anti-Mouse CD126/IL-6R alpha Rabbit Recombinant Antibody, PBS Only (Capture)

Catalog Number: 98024-1-PBS



Basic Information

Catalog Number: 98024-1-PBS	GenBank Accession Number: NML_010559.3	Purification Method: Protein A purification
Size: 1mg, 2 mg/ml	GeneID (NCBI): 16194	CloneNo.: 230371A7
Source: Rabbit	UNIPROT ID: P22272	
Isotype: IgG	Full Name: interleukin 6 receptor, alpha	
	Calculated MW: 50KD	

Applications

Tested Applications:
FC, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
mouse

Product Information

98024-1-PBS targets CD126/IL-6R alpha as part of a matched antibody pair.

MP00182-2: 98024-1-PBS capture and 83209-2-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-6 (IL-6) is a pleiotropic cytokine produced by a variety of cells during infection, trauma, and immunological challenge (PMID: 8274730). IL-6 acts via a receptor complex consisting of two distinct membrane-bound glycoproteins, an 80-kDa IL-6-binding subunit (IL-6R alpha, CD126, gp80) and a 130-kDa signal-transducing element (gp130, CD130). After binding of IL-6 to membrane-bound IL-6R alpha, the complex of IL-6 and IL-6R alpha associates with gp130, thus activating the receptor (PMID: 9716487). Expression of gp130 is found in almost all organs while expression of IL-6R alpha is predominantly confined to hepatocytes and leukocyte subpopulations (monocytes, neutrophils, T cells, and B cells) (PMID: 11149892).

Storage

Storage:
Store at -80°C.

Storage Buffer:
PBS Only

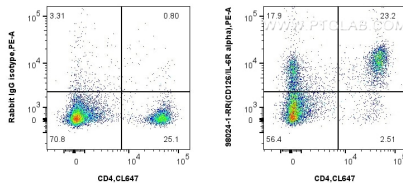
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

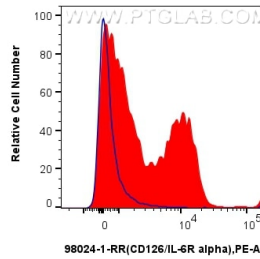
E: proteintech@ptglab.com
W: ptglab.com

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

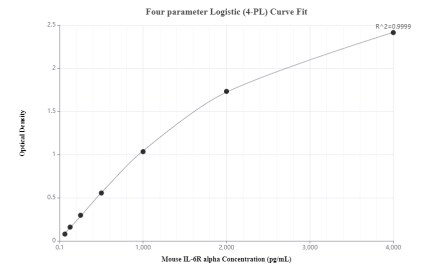
Selected Validation Data



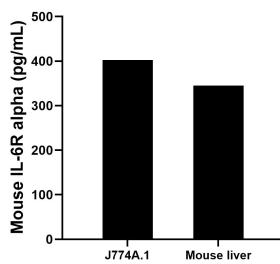
1x10⁶ mouse splenocytes were surface stained with 0.25 ug Anti-Mouse CD126/IL-6R alpha Rabbit Recombinant Antibody (98024-1-RR, Clone: 230371A7) or Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) and PE-Conjugated Goat Anti-Rabbit IgG(H+L). Cells were co-stained with CoraLite® Plus 647 Anti-Mouse CD4 (GK1.5) (CL647-65104, Clone: GK1.5). Cells were not fixed. This data was developed using the same antibody



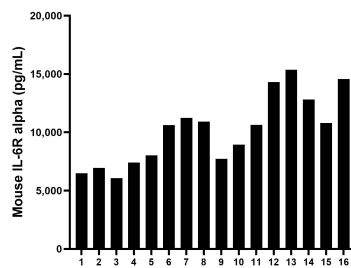
1x10⁶ mouse splenocytes were surface stained with 0.25 ug Anti-Mouse CD126/IL-6R alpha Rabbit Recombinant Antibody (98024-1-RR, Clone:230371A7) (red) or Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue) and PE-Conjugated Goat Anti-Rabbit IgG(H+L). Cells were not fixed. This data was developed using the same antibody clone with 98024-1-PBS in a different storage buffer formulation.



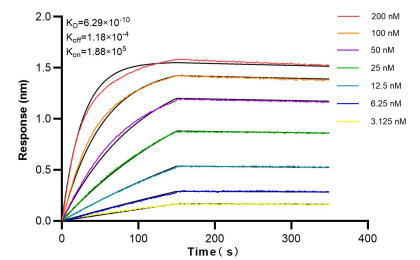
Sandwich ELISA standard curve of MP00182-2, Mouse CD126/IL-6R alpha Monoclonal Matched Antibody Pair - PBS only. 98024-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0664. 83209-2-PBS was HRP conjugated as the detection antibody. Range: 62.5-4000 pg/mL



J774A.1 mouse reticulum cell sarcoma macrophage cells (1 x 10⁶ cells/mL) were cultured for 3 days in DMEM containing 10% fetal bovine serum. An aliquot of the cell culture supernatants were removed, assayed for mouse IL-6R alpha, and measured 402.5 pg/mL. Liver tissue from one mouse was homogenized and seeded into 100 mL of RPMI containing 10% fetal bovine serum, 2 mM L-glutamine, 100 U/mL penicillin, 100 µg/mL streptomycin sulfate,



Serum of sixteen mice were measured. The IL-6R alpha concentration of detected samples was determined to be 10,180.3 pg/mL with a range of 6,065.2-15,362.2 pg/mL.



Bi-layer interferometry (BLI) kinetic assays of 98024-1-RR against Mouse IL-6R alpha were performed. The affinity constant is 0.629 nM.