

# IL-6R alpha Rabbit pAb

IL-6R alpha Rabbit pAb Catalog # AP94724

## **Specification**

## IL-6R alpha Rabbit pAb - Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Mouse
Host
Clonality
Calculated MW
Physical State

P22272
Rabbit
Rabbit
Polyclonal
Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from mouse IL-6R alpha

Epitope Specificity 351-460/460

Isotype
Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Isoform 1: Basolateral cell membrane;

Single-pass type I membrane protein.

Isoform 2: Secreted.

SIMILARITY Belongs to the type I cytokine receptor

family. Type 3subfamily. Contains 1 fibronectin type-III domain. Contains 1 lg-like C2-type (immunoglobulin-like)

domain.

SUBUNIT Hexamer of two molecules each of IL6,

IL6R and IL6ST.

Post-translational modifications A short soluble form may also be released

from the membrane by proteolysis. This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Important Note

### **Background Descriptions**

Interleukin 6 (IL6) is a potent pleiotropic cytokine that regulates cell growth and differentiation and plays an important role in immune response. The protein encoded by this gene is a subunit of the receptor complex for IL6. The IL6 receptor is a protein complex consisting of this protein and interleukin 6 signal transducer (IL6ST/GP130/IL6-beta), a receptor subunit also shared by many other cytokines. Dysregulated production of IL6 and this receptor are implicated in the pathogenesis of many diseases, such as multiple myeloma, autoimmune diseases and prostate cancer. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq].

## IL-6R alpha Rabbit pAb - Additional Information



**Gene ID** 16194

#### **Other Names**

Interleukin-6 receptor subunit alpha, IL-6R subunit alpha, IL-6R-alpha, IL-6RA, IL-6R 1, CD126, Soluble interleukin-6 receptor subunit alpha, sIL6R, Il6ra {ECO:0000312|MGI:MGI:105304}, Il6r

## **Target/Specificity**

Isoform 2 is expressed in peripheral blood mononuclear cells and weakly found in urine and serum.

### **Dilution**

<span class ="dilution\_WB">WB~~1:1000</span><br \><span class
="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_E">E~~N/A</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### Storage

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

# IL-6R alpha Rabbit pAb - Protein Information

Name Il6ra {ECO:0000312|MGI:MGI:105304}

Synonyms II6r

## **Function**

Part of the receptor for interleukin 6. Binds to IL6 with low affinity, but does not transduce a signal. Signal activation necessitate an association with IL6ST. Activation leads to the regulation of the immune response, acute-phase reactions and hematopoiesis. The interaction with membrane-bound IL6R and IL6ST stimulates 'classic signaling', the restricted expression of the IL6R limits classic IL6 signaling to only a few tissues such as the liver and some cells of the immune system. Whereas the binding of IL6 and soluble IL6R to IL6ST stimulates 'trans-signaling'. Alternatively, 'cluster signaling' occurs when membrane-bound IL6:IL6R complexes on transmitter cells activate IL6ST receptors on neighboring receiver cells.

# **Cellular Location**

[Interleukin-6 receptor subunit alpha]: Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

Expressed by dendritic cells.

### IL-6R alpha Rabbit pAb - Protocols

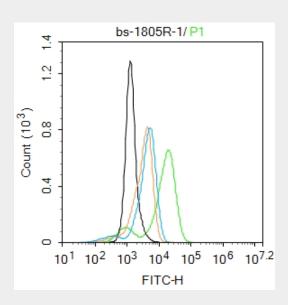
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

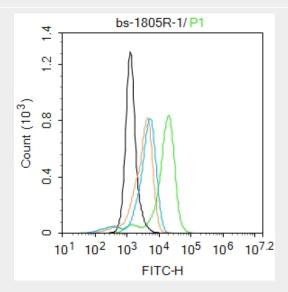


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## IL-6R alpha Rabbit pAb - Images



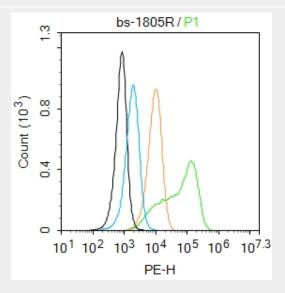
Blank control:THP-1. Primary Antibody (green line): Rabbit Anti-IL-6R alpha antibody (AP94724) Dilution: 1  $\mu$ g /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-FITC Dilution: 0.5  $\mu$ g /test. Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature . Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



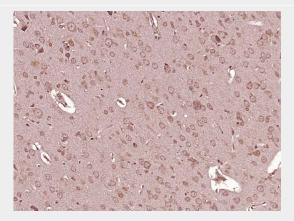
Blank control:THP-1. Primary Antibody (green line): Rabbit Anti-IL-6R alpha antibody (AP94724) Dilution: 1  $\mu$ g /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-FITC Dilution: 0.5  $\mu$ g /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature.The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at



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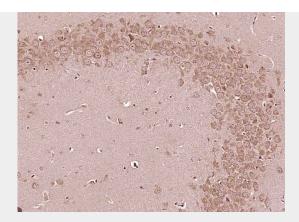


Blank control:U937. Primary Antibody (green line): Rabbit Anti-IL-6R alpha antibody (AP94724) Dilution:  $2 \mu g / 10^6$  cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-PE Dilution:  $1 \mu g$  /test. Protocol The cells wereincubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

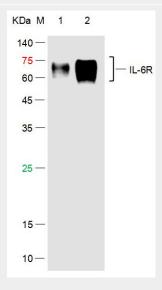


Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IL-6R alpha) Polyclonal Antibody, Unconjugated (AP94724) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.





Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IL-6R alpha) Polyclonal Antibody, Unconjugated (AP94724) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Sample: Lane 1:Recombinant Human IL-6R alpha Protein at 50ng Lane 2:Recombinant Human IL-6R alpha Protein at 500ng Primary: Rabbit Anti-IL-6R alpha Antibody at 1/1000 dilution (Cat.AP94724) Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 42kD Observed band size: 58-75kD

# IL-6R alpha Rabbit pAb - Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.