

IL-10Ra Polyclonal Antibody

Catalog # AP73813

### Specification

## IL-10Rα Polyclonal Antibody - Product Information

Reactivity Human Host Rabbit Clonality Polyclo	_

## IL-10Rα Polyclonal Antibody - Additional Information

Gene ID 3587

**Other Names** IL10RA; IL10R; Interleukin-10 receptor subunit alpha; IL-10 receptor subunit alpha; IL-10R subunit alpha; IL-10RA; CDw210a; Interleukin-10 receptor subunit 1; IL-10R subunit 1; IL-10R1; CD210

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

**Format** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** -20°C

# IL-10Rα Polyclonal Antibody - Protein Information

Name IL10RA

#### Synonyms IL10R

#### Function

Cell surface receptor for the cytokine IL10 that participates in IL10-mediated anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Upon binding to IL10, induces a conformational change in IL10RB, allowing IL10RB to bind IL10 as well (PubMed:<a href="http://www.uniprot.org/citations/16982608" target="\_blank">16982608</a>). In turn, the heterotetrameric assembly complex, composed of two subunits of IL10RA and IL10RB, activates the kinases JAK1 and TYK2 that are constitutively associated with IL10RA and IL10RB respectively (PubMed:<a href="http://www.uniprot.org/citations/12133952" target="\_blank">12133952</a>). These kinases then phosphorylate specific tyrosine residues in the intracellular domain in IL10RA leading to the recruitment and subsequent phosphorylation of STAT3. Once phosphorylated, STAT3 homodimerizes, translocates to the nucleus and activates the expression of anti-inflammatory genes. In addition, IL10RA-mediated activation of STAT3 inhibits starvation-induced autophagy (PubMed:<a href="http://www.uniprot.org/citations/26962683" target="\_blank">26962683</a>).



**Cellular Location** 

Cell membrane; Single-pass type I membrane protein Cytoplasm

**Tissue Location** 

Primarily expressed in hematopoetic cells including B-cells, T-cells, NK cells, monocytes and macrophages. Not expressed in non-hematopoetic cells such as fibroblasts or endothelial cells

# IL-10Rα Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## IL-10Ra Polyclonal Antibody - Images



### IL-10Rα Polyclonal Antibody - Background

Cell surface receptor for the cytokine IL10 that participates in IL10-mediated anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Upon binding to IL10, induces a conformational change in IL10RB, allowing IL10RB to bind IL10 as well (PubMed:16982608). In turn, the heterotetrameric assembly complex, composed of two subunits of IL10RA and IL10RB, activates the kinases JAK1 and TYK2 that are constitutively associated with IL10RA and IL10RB respectively (PubMed:12133952). These kinases then phosphorylate specific tyrosine residues in the intracellular domain in IL10RA leading to the recruitment and subsequent phosphorylation of STAT3. Once phosphorylated, STAT3 homodimerizes, translocates to the nucleus and activates the expression of anti-inflammatory genes. In addition, IL10RA-mediated activation of STAT3 inhibits starvation- induced autophagy (PubMed:26962683).