10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IL-10Rα Polyclonal Antibody

Catalog # AP73813

Product Information

Application	WB
Primary Accession	Q13651
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63003

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℃

Protein Information

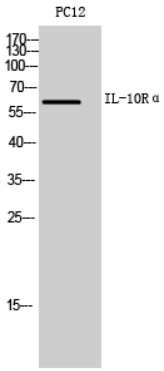
Name	IL10RA
Synonyms	IL10R
Function	Cell surface receptor for the cytokine IL10 that participates in IL10-mediated anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Upon binding to IL10, induces a conformational change in IL10RB, allowing IL10RB to bind IL10 as well (PubMed: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).

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

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).

Images



Western Blot analysis of PC12 cells using IL-10Rα Polyclonal Antibody.. Secondary antibody was diluted at 1:20000