

IL10RA Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP8768c

Specification

IL10RA Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q13651</u>

IL10RA Antibody (Center) Blocking Peptide - Additional Information

Gene ID 3587

Other Names

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, IL10RA, IL10R

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8768c was selected from the Center region of human IL10RA. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

IL10RA Antibody (Center) Blocking Peptide - 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

IL10RA Antibody (Center) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

IL10RA Antibody (Center) Blocking Peptide - Images

IL10RA Antibody (Center) Blocking Peptide - Background

IL10RA is a receptor for IL10; binds IL10 with a high affinity.

IL10RA Antibody (Center) Blocking Peptide - References

Jones B.C., et.al., Proc. Natl. Acad. Sci. U.S.A. 99:9404-9409(2002).