

Summary

Production Name	IL10 (8U9) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	IL10
Alternative Names	IL10; CSIF; GVHDS; IL10A; TGIF; Interleukin-10;
Gene ID	3586.0
SwissProt ID	P22301.

Application

Dilution Ratio	WB 1:500-1:2000
Molecular Weight	21kDa

Background

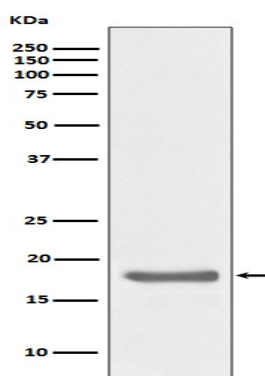
Product Name: IL10 (8U9) Rabbit Monoclonal Antibody
Catalog #: AMRe12483



Interleukin-10 (IL-10) is an anti-inflammatory cytokine that is produced by T cells, NK cells, and macrophages. IL-10 initiates signal transduction by binding to a cell surface receptor complex consisting of IL-10 RI and IL-10 RII, leading to the activation of Jak1 and Tyk2 and phosphorylation of Stat3. Major immune regulatory cytokine that acts on many cells of the immune system where it has profound anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Mechanistically, IL10 binds to its heterotetrameric receptor comprising IL10RA and IL10RB leading to JAK1 and STAT2-mediated phosphorylation of STAT3 (PubMed:[16982608](http://www.uniprot.org/citations/16982608)). In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators (PubMed:[18025162](http://www.uniprot.org/citations/18025162)). Targets antigen-presenting cells (APCs) such as macrophages and monocytes and inhibits their release of pro-inflammatory cytokines including granulocyte-macrophage colony-stimulating factor /GM-CSF, granulocyte colony-stimulating factor/G-CSF, IL-1 alpha, IL-1 beta, IL-6, IL-8 and TNF-alpha (PubMed:[1940799](http://www.uniprot.org/citations/1940799), PubMed:[7512027](http://www.uniprot.org/citations/7512027), PubMed:[11564774](http://www.uniprot.org/citations/11564774)). Interferes also with antigen presentation by reducing the expression of MHC-class II and co-stimulatory molecules, thereby inhibiting their ability to induce T cell activation (PubMed:[8144879](http://www.uniprot.org/citations/8144879)). In addition, controls the inflammatory response of macrophages by reprogramming essential metabolic pathways including mTOR signaling (By similarity).

Research Area

Image Data



Western blot analysis of IL10 expression in Ramos cell lysate.

Note

For research use only.