

# Mouse IL-10 Rα Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF-474-NA

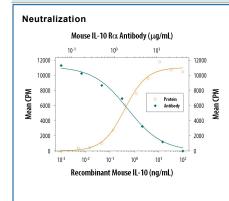
DESCRIPTION			
Species Reactivity	Mouse		
Specificity	Detects mouse IL-10 R $\alpha$ in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 25% cross-reactivity with recombinant human IL-10 R $\alpha$ is observed.		
Source	Polyclonal Goat IgG		
Purification	Antigen Affinity-purified		
Immunogen	S. frugiperda insect ovarian cell line Sf 21-derived recombinant mouse IL-10 Rα Thr24-Asn238 (Lys188Arg and Glu222Gly) Accession # Q61727		
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.		

#### **APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample	
Western Blot	0.1 μg/mL	Recombinant Mouse IL-10 Rα (Catalog # 474-MR)	
Neutralization	Measured by its ability to neutralize IL-10-induced proliferation in the MC/9-2 mouse mast cell line [Thompson-Snipes, L. <i>et al.</i> (1991) J. Exp. Med. <b>173</b> :507]. The Neutralization Dose (ND <sub>50</sub> ) is typically 1-3 μg/mL in the presence of 1 ng/mL Recombinant Mouse IL-10.		

#### DATA



Cell Proliferation Induced by IL-10 and Neutralization by Mouse IL-10 Rα Antibody. Recombinant Mouse IL-10 (Catalog # 417-ML) stimulates proliferation in the MC/9-2 mouse mast cell line in a dosedependent manner (orange line). Proliferation elicited by Recombinant Mouse IL-10 (1 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse IL-10 Rα Antigen Affinitypurified Polyclonal Antibody (Catalog # AF-474-NA). The ND<sub>50</sub> is typically 1-3 µg/mL.

## PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.2 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

## Stability & Storage

## Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month from date of receipt, 2 to 8 °C, reconstituted.
- 6 months from date of receipt, -20 to -70 °C, reconstituted.

### BACKGROUND

IL-10, initially designated cytokine synthesis inhibitory factor (CSIF), is a potent immunosuppressant of macrophage functions. IL-10 is also a pleiotropic cytokine with multiple immunostimulatory as well as immunosuppressive effects on a variety of other cell types. IL-10 binds specifically and with high affinity to cell-surface receptors. Mouse and human cDNA clones encoding the ligand-binding IL-10 receptor (IL-10 R) have been isolated. The IL-10 R mRNA has been detected in all cell types that are known to respond to IL-10.

Human and mouse IL-10 receptors are structurally related to the IFNγ receptor. These receptors are members of the class II subgroup of the cytokine receptor superfamily. The deduced amino acid sequence of human IL-10 R is approximately 60% identical to mouse IL-10 R. Although human IL-10 has cross-species activities and is active on mouse cells, mouse IL-10 is species-specific in its actions and does not bind to the human IL-10 receptor. The human IL-10 R gene has been mapped to chromosome 11q23.3. Recombinant IL-10 soluble receptor, consisting of the extracellular domain of IL-10 R, binds IL-10 with high affinity in solution and is a potent IL-10 antagonist.

ROD