



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Mouse Anti-Human Interleukin-10

Catalog No.
RB-IP-01-112

Species
Human

Isotype:
Mouse IgG1

Accession No:
NM_000572

Description

Interleukin 10, or IL-10, is a 178 amino acid protein that is primarily secreted by TH2 clones. IL-10 has dual functions, the first of which is the suppression of cytokine production by TH1 clones responding to antigen presented by monocyte and macrophage antigen presenting cells (APCs). The second function consists of the inhibition of response of cytokine targeted cells, possibly by the downregulation of CD25 (the interleukin-2 receptor) on macrophages and B lymphocytes. Human and murine IL-10 exhibit 81% sequence identity at the amino acid level, and share 73% identity at the cDNA level. Both human and murine IL-10 are acid-labile and exist as non-covalently-linked homodimers in solution. IL-10 exerts its biological activity through the IL-10 receptor (IL-10R), a 560 amino acid, glycoprotein whose expression can be induced in cultured macrophages and fibroblasts by lipopolysaccharide (LPS) stimulation. IL-10 expression has been shown to be elevated in HIV-1 infected individuals and has been implicated in the progression of the disease.

Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Direct ELISA	•			For Sandwich-based ELISA and membrane-based assay, detecting level is up to 1pg/ml when it is used for capture
Western Blotting	•			0.1-0.2 µg/ml
Immunohistology - frozen			•	
Immunohistology -paraffin			•	
Immunohistology - resin			•	
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorence staining			•	
Neutralization			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
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Preparation

Immunogen was recombinant protein derived from human IL-10. This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with the immunogen. The IgG fraction of tissue culture supernatant was purified by Protein G affinity chromatography.

Specificity

This antibody was selected for its ability to detect human IL-10 in Sandwich ELISA and Array. In ELISA, this antibody shows approximately 5% cross-reactivity with human IL-1b and 8, and no cross-reactivity with murine IL-10 and other tested proteins.

Reconstitution

Supplied as 100 µg of lyophilized purified antibody. It can be reconstituted with sterile PBS before use. **Please avoid freeze-thaw cycles.**

Storage Procedure

Lyophilized: store at 4 C. After reconstitution, if not used within a month, aliquot and store at 20 C.

Stability

Two years lyophilized, one month in solution at 4 C.

Reference

Feng, L., Tang, W.W., Chang, J.C. and Wilson, C.B. 1993. Molecular cloning of rat cytokine synthesis inhibitory factor (IL-10) cDNA and expression in spleen and macrophages. *Biochem. Biophys. Res. Commun.* 192: 452-458.

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