

Applications: Detected MW: Species & Reactivity: Isotype: WB 17 kDa Human, Mouse IgG1

# BACKGROUND

The IL-1 family of cytokines is produced by activated monocytes/macrophages during the acute phase of inflammatory response. The IL-1 cytokines are also produced by a variety of other including neutrophiles, keratinocytes, cells epithelial cells, fibroblasts, adrenal cortical and medullary cells1. The cytokine IL-1alpha and IL-1beta have a 25% homology in amino acids. The biological action of IL-1 cytokines is the results of their binding to the IL-1 receptor type I (Rt1). A second IL-1 receptor (Rt2) does not produce any biological effect and most probably represents a "decoy receptor". A third member of IL-1 family of cytokines is IL-1 receptor antagonist (IL-1 Ra), which exhibits same binding affinity to both types of IL-1 receptors, but without inducing a biological response, thus antagonizing the effects of IL-12. Interestingly, the action of IL-1 Ra is not restricted to the counterregulation of inflammatory processes. IL-1 Ra has been shown to be upregulated in the serum of obese subjects3.

### References:

- 1. Carter, D. B. et al: Nature. 344:633, 1990.
- 2. Granowitz, E. V. et al: J. Biol. Chem. 266:14147, 1991.

3. Saltevo, J. et al : Diab Vasc Dis Res. 4:328, 2007.

# **TECHNICAL INFORMATION**

### Source:

Anti-IL-1 Receptor Antagonist is a mouse monoclonal antibody raised against *E. coli*-expressed recombinant human IL-1Ra protein.

### **Specificity and Sensitivity:**

This antibody specifically detects human IL-Ra proteins. The molecular weight of detected IL-1 Ra is 17kDa. This antibody does not cross-react with other IL-1 family members.

Storage Buffer: PBS and 30% glycerol

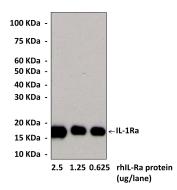
### Storage:

Store at  $-20^{\circ}$ C for at least one year. Store at  $4^{\circ}$ C for frequent use. Avoid repeated freeze-thaw cycles.

# APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC	n/d
ICC	n/d
FACS	n/d
*Optimal dilutions must be determined by end user.	

# QUALITY CONTROL DATA



Specific detection of recombinant human IL-1 Ra proteins in Western blot analysis using IL-1 Receptor Antagonist Mouse Monoclonal Antibody.