

**DESCRIPTION**

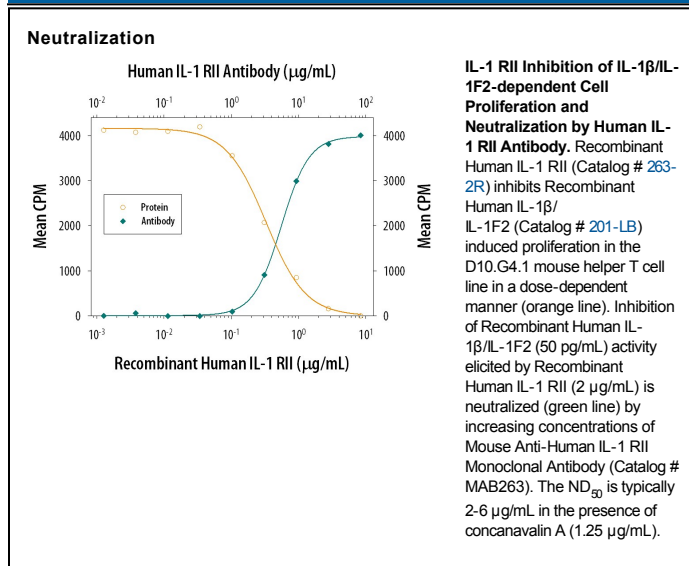
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-1 RII in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-1 RI, rhIL-18 R, and recombinant mouse IL-18 R is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 32437
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-1 RII Phe14-Glu343 (Glu297Gly) Accession # P27930
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	Recombinant Human IL-1 RII (Catalog # 263-2R) under non-reducing conditions only
<b>Immunocytochemistry</b>	8-25 µg/mL	Immersion fixed human peripheral blood mononuclear cells
<b>Neutralization</b>		Measured by its ability to neutralize IL-1 RII-mediated inhibition of proliferation in the D10.G4.1 mouse helper T cell line. The Neutralization Dose (ND <sub>50</sub> ) is typically 2-6 µg/mL in the presence of 2 µg/mL Recombinant Human IL-1 RII, 50 pg/mL Recombinant Human IL-1β/IL-1F2, and 1.25 µg/mL concanavalin A.

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Two distinct types of receptors that bind the pleiotropic cytokines IL-1 $\alpha$  and IL-1 $\beta$  have been described. The IL-1 receptor type I is an 80 kDa transmembrane protein that is expressed predominantly by T cells, fibroblasts and endothelial cells. IL-1 receptor type II is a 68 kDa transmembrane protein found on B lymphocytes, neutrophils, monocytes, large granular leukocytes and endothelial cells. Both receptors are members of the immunoglobulin superfamily and show approximately 28% sequence similarity in their extracellular domains. The two receptor types do not heterodimerize in a receptor complex.

An IL-1 receptor accessory protein that can heterodimerize with the type I receptor in the presence of IL-1 $\alpha$  or IL-1 $\beta$  but not IL-1 $\alpha$ , was identified (1). This type I receptor complex appears to mediate all the known IL-1 biological responses. The receptor type II has a short cytoplasmic domain and does not transduce IL-1 signals. In addition to the membrane-bound form of IL-1 RII, a naturally-occurring soluble form of IL-1 RII has been described. It has been suggested that the type II receptor, either as the membrane-bound or as the soluble form, serves as a decoy for IL-1 and inhibits IL-1 action by blocking the binding of IL-1 to the signaling type I receptor complex.

## References:

1. Greenfeder, S. *et al.* (1995) *J. Biol. Chem.* **270**:13757.