

## DESCRIPTION

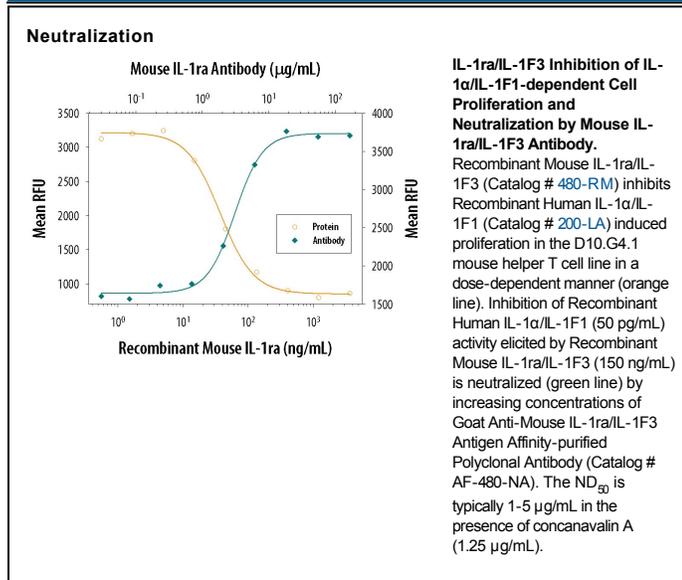
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse IL-1ra/IL-1F3 in ELISAs and Western blots. In sandwich ELISAs, approximately 45% cross-reactivity with recombinant rat IL-1ra/IL-1F3 and less than 1% cross-reactivity with recombinant human IL-1ra/IL-1F3, recombinant porcine IL-1ra/IL-1F3, and recombinant equine IL-1ra/IL-1F3 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse IL-1ra/IL-1F3
<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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse IL-1ra/IL-1F3 (Catalog # 480-RM)
<b>Mouse IL-1ra/IL-1F3 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	0.2-0.8 µg/mL	Mouse IL-1ra/IL-1F3 Antibody (Catalog # AF-480-NA)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Mouse IL-1ra/IL-1F3 Biotinylated Antibody (Catalog # BAF480)
<b>Standard</b>		Recombinant Mouse IL-1ra/IL-1F3 (Catalog # 480-RM)
<b>Neutralization</b>		Measured by its ability to neutralize IL-1ra/IL-1F3 inhibition of IL-1α/IL-1F1-dependent proliferation in the D10.G4.1 mouse helper T cell line [Symons, J.A. <i>et al.</i> (1987) in <i>Lymphokines and Interferons</i> , a Practical Approach. Clemens, M.J. <i>et al.</i> (eds): IRL Press. 272]. The Neutralization Dose (ND <sub>50</sub> ) is typically 1-5 µg/mL in the presence of 150 ng/mL Recombinant Mouse IL-1ra/IL-1F3, 50 pg/mL Recombinant Human IL-1α/IL-1F1 and 1.25 µg/mL concanavalin A.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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

IL-1ra was originally isolated from the urine of patients with monocytic leukemia and has also been purified from adherent monocytes. The naturally-occurring, fully glycosylated form has an apparent molecular weight of about 25,000 Daltons. The protein shows 26% amino acid homology to IL-1 $\beta$  and 19% homology to IL-1 $\alpha$ . It will compete with either factor for receptor binding, but does not interact with either one. Human IL-1ra will bind to both types of IL-1 receptor (I and II) on human cells. In mouse, IL-1 RII does not bind IL-1ra. The recombinant, non-glycosylated form of IL-1ra blocks binding of IL-1 to its receptor equally as well as the naturally-occurring, glycosylated form. The IL-1ra has been shown to block the inflammatory responses induced by IL-1 both *in vitro* and *in vivo*. Pre-clinical and clinical studies were done to test possible therapeutic applications for IL-1ra in the treatment of sepsis, rheumatoid arthritis and chronic myelogenous leukemia.