

DESCRIPTION

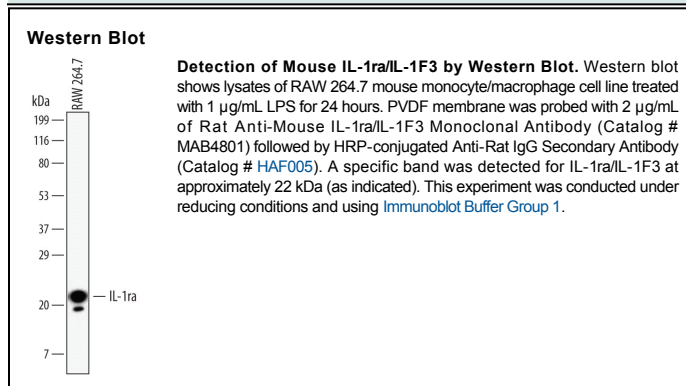
Species Reactivity	Mouse
Specificity	Detects mouse IL-1ra/IL-1F3 in direct ELISAs and Western blots. In Western blots, approximately 30%-50% cross-reactivity with recombinant equine IL-1ra and recombinant human (rh) IL-1ra is observed. Less than 5% cross-reactivity with recombinant mouse (rm) IL-1b, rmIL-18, rmIL-36Ra, rmIL-36a, rmIL-36b, rmIL-1F10, rhIL-36, rhIL-1F7, or recombinant porcine IL-1ra, or recombinant rat IL-1ra is observed.
Source	Monoclonal Rat IgG ₁ Clone # 694204
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-1ra/IL-1F3 Arg8-Gln159 Accession # Q542W1
Formulation	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
Western Blot	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 kDa. The protein shows 26% amino acid homology to IL-1β and 19% homology to IL-1α. 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.