

**Certificate of Analysis**

**Product:** IgG fraction of Anti-Human IL-1 Receptor type II (IL-1RII) (Rabbit)

**Code:** 209-401-305

**Lot #:** 17591

**Size:** 1.0 mg

**Physical State:** Liquid (sterile filtered)

**Protein Concentration:** 2.0 mg/ml (by UV absorbance at 280 nm)

**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

**Stabilizer:** None

**Preservative:** 0.01% (w/v) Sodium Azide

**Storage Conditions:** Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is six (6) months from date of opening.

**Application Note(s):** This IgG fraction antibody of anti-Human IL-1 Receptor Type II (IL-1RII) has been tested for use in ELISA, radioimmunoassays, flow cytometry and immunoprecipitation. Reactivity in other immunoassays is unknown. IL-1RII has been termed p68 or CD121 in some laboratories. IL-1RII has been shown to bind IL-1, IL-1 $\alpha$  and IL-1 $\beta$ .

**Recommended Dilution(s):** This product has been assayed for the ability to immunoprecipitate antigen. A dilution range of 1:400 to 1:800 is suggested for this immunoassay. For immunoprecipitation, pre-clearing with a non-specific rabbit IgG is helpful to reduce background. This product has been assayed by immunoblot using HRP Goat-anti-Rabbit IgG [H&L] (code # 611-1302) and TMB as a substrate. A working dilution range of 1:200 to 1:400 is suggested for this application. This product has been assayed by ELISA against soluble (extracellular) IL-1RII using HRP Conjugated Anti-Rabbit IgG [H&L] (Goat) (code # 611-1302) and ABTS as a substrate for 30 minutes at room temperature. A working dilution range of 1:1,000 to 1:2000 is suggested for this product. For use in ELISA formats, this antibody is best used as the second antibody in combination with a monoclonal antibody as a capture antibody. This product has been assayed by radioimmunoassay against antigen. A dilution of 1:8,000 is suggested for this immunoassay. Optimal titers for other applications should be determined by the researcher.

**Purity and Specificity:** This is an IgG preparation of whole rabbit serum purified by Protein A chromatography. The antibody is directed against the extracellular domain of the human IL-1R type II, but precipitates the intact receptor expressed on human cells. In general, this antibody also detects primate IL-1RII. The antibody does not recognize human IL-1, IL-1Ra or IL-1R type I. In ELISA formats and other immunoreactive assays, this antibody will detect the extracellular domain of the IL-1R type II (also called soluble IL-1R type II) found in human body fluids, particularly in the circulation, urine and supernatants of cells and synovial fluid. This antibody can be used for FACS analysis. Caution should be exhibited as the F(c) domain of the rabbit IgG molecule may interact with cells non-specifically.

**Endotoxin Content:** <10 pg/μl by LAL method.

**Immunogen:** The whole rabbit serum used to produce this IgG fraction antibody was prepared by repeated immunizations with recombinant human IL-1R type II.

**Reference(s):**

Arend, W.P., M. Malyak, et al. (1994). Binding of IL-1 $\alpha$ , IL-1 $\beta$ , and IL-1 receptor antagonist by soluble IL-1 receptors and levels of soluble IL-1 receptors in synovial fluids. *J. Immunol* **153**: 4766-4774.

Colotta, F., S.K. Dower, et al. (1994). The type II decoy receptor: a novel regulatory pathway for interleukin-1. *Immunol Today* **15**: 562-566.

Colotta, F., F. Re, et al. (1993). Interleukin-1 type II receptor: a decoy target for IL-1 that is regulated by IL-4. *Science* **261**: 472-475.

Dower, S.K., J.M. Wignall, et al. (1989). Retention of ligand binding activity by the extracellular domain of the IL-1 receptor. *J Immunol* **142** (12) 4314-20.

McMahon, C.J., J.L. Slack, et al (1991). A novel IL-1 receptor cloned from B cells by mammalian expression is expressed in many cell types. *EMBO J* **10**: 2821-2832

Pruitt, J.H., M.B. Welborn, et al. (1996) Increased soluble interleukin-1 type II receptor concentrations in postoperative patients and in patients with sepsis syndrome. *Blood* **87** (8): 3282-8

Symons, J.A., P.A. Young, et al (1993) The soluble interleukin-1 receptor: ligand binding properties and mechanism of release. *Lymphokine Cytokine Res* **12**: 381.

**Related Products:**

#011-001-297	LOW ENDOTOXIN CONTROL RABBIT IgG	
#611-703-127	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10	
#611-132-122	IRDye800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10	
#B501-0500	500 g	BLOTTO
#BSA-30	500 ml	30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer)
#B304	10 ml	NORMAL GOAT SERUM (NGS)
#MB-070	Blocking Buffer for Fluorescent Western Blotting	
#KIA-003	<b>MaxTag</b> <sup>TM</sup> Anti-RABBIT IgG Kit for Immunoblotting	
#MB-070	Blocking Buffer for Fluorescent Western Blotting	

**USDA Certification:** All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

**Note:** This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.