

Product datasheet for R1132

IL1RA (IL1RN) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, FN, IHC, WB

Recommended Dilution: This IgG fraction antibody of anti-Human IL-1 Receptor Antagonist has been tested for use in

Neutralizations, ELISA, Radioimmunoassays, Western blotting, Immunohistochemistry and

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Flow cytometry. Reactivity in other immunoassays is unknown.

Note: This product has been assayed by immunoblot using HRP Goat-anti-Rabbit IgG [H&L] and TMB as a substrate. A working dilution range of 1:400 to 1:800 is suggested for this application. This product has been assayed by ELISA against IL-1Receptor Antagonist using HRP Conjugated Anti-Rabbit IgG [H&L] (Goat) and ABTS as a substrate for 30 minutes at room temperature. A working dilution range of 1:500 to 1:1,000 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

Immunohistochemistry. A dilution of 1:400 or greater is suggested for this immunoassay. Either paraffin fixation or cryofixation can be used for Immunohistochemistry. This product has been assayed by radioimmunoassay against antigen. A dilution of 1:8,000 is suggested

for this immunoassay.

Recommended Dilutions:

ELISA: 1/1,000-1/5,000.

Western Blot: 1/500-1/2,000.

Reactivity: Human, Monkey

Host: Rabbit
Clonality: Polyclonal

Immunogen: Prepared by repeated immunizations with recombinant human slL-1Ra produced in *E.coli*.





Specificity:

In general, this antibody also detects primate IL-1Ra in the same formats using similar dilutions, but not mouse or rabbit IL-1Ra. The antibody does not recognize human IL-1a , IL-1b or IL-1 receptor type I and type II.

This antibody is primarily directed against the secreted form of IL-1Ra (also termed sIL-1Ra) but recognizes the native (non-denatured) as well as denatured intracellular form of IL-1Ra (also termed icIL-1Ra). IcIL-1Ra is found in many cells as constitutively expressed protein, particularly epithelial cells and keratinocytes. This antibody does not distinguish between sIL-1Ra and icIL-1Ra in ELISA formats or by Immunohistochemistry. When used in immunoblot analysis, it will recognize 17,000 MW IL-1Ra in supernatants released from supernatants or lysates of 2 x 10e6 endotoxin-stimulated human peripheral blood mononuclear cells (PBMC). PBMC are stimulated for 24 hours with 1% (v/v) human serum plus 10 ng/mL E.coli LPS. However, in lysates of PBMC, icIL-1Ra is also found after 48-72 hours of culture. In monocytic cells, the initial IL-1Ra transcript is for sIL-1Ra which can be found almost exclusively intracellularly.

In ELISA formats and other immunoreactive assays, this antibody will recognize both sIL-1Ra and icIL-1Ra. Biologically, sIL-1Ra and icIL-1Ra both function as IL-1 receptor antagonists by binding to the type I IL-1R and prevent signaling by IL-1a or IL-1b . However, sIL-1Ra is primarily secreted whereas icIL-1Ra remains associated with the cell. This antibody is also useful for neutralization of human and primate IL-1Ra. If a body fluid, cell supernatant or serum contains IL-1Ra, it is possible to neutralize the inhibitory activity of IL-1Ra on IL-1 activity, being exogenous or endogenous IL-1. A 1:200 dilution of this antibody is incubated with the sample for 4 hours. The mixture is then added to cells in the assay for IL-1 activity. A control of normal rabbit IgG is recommended. An increase in the activity of the sample indicates that the inhibitory activity of IL-1Ra on an IL-1-mediated read-out has been neutralized. Using recombinant human IL-1Ra as a positive control, a 1:200 dilution of this antibody will neutralize the inhibitory activity of IL-1Ra at 100 ng/mL. This antibody does not neutralize the biological activity IL-1. 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.

Formulation: 0.02M Potassium Phosphate, 0.15M Sodium Chloride, pH 7.2 with 0.01% (w/v) Sodium Azide

as preservative. State: Purified

State: Liquid (sterile filtered) purified Ig fraction.

Concentration: lot specific

Purification: DEAE Chromatography.

Conjugation: Unconjugated

Storage: Store the antibody (undiluted) at 2-8°C for one month or (in aliquots) at -20°C for longer.

Dilute only prior to immediate use. Avoid cycles of freezing and thawing.

Stability: Shelf life: One year from despatch.

Gene Name: interleukin 1 receptor antagonist



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Database Link: Entrez Gene 3557 Human

P18510

Background: IL1RA is a member of the Interleukin 1 cytokine family. This protein inhibits the activities of

Interleukin 1, alpha (IL1A) and Interleukin 1, beta (IL1B), and modulates a variety of

Interleukin 1 related immune and inflammatory responses. This gene and five other closely related cytokine genes form a gene cluster spanning approximately 400 kb on chromosome

2. A polymorphism of this gene is reported to be associated with increased risk of osteoporotic fractures and gastric cancer. Four alternatively spliced transcript variants

encoding distinct isoforms have been reported.

Synonyms: IL1F3, IL-1ra, IL-1RN, IRAP, IL1 inhibitor, ICIL-1RA

Note: Endotoxin Content: < 10 pg/ml by LAL method.