

IL-1RII (P-20): sc-27854

BACKGROUND

Decoy receptors are structurally incapable of activating signaling pathways, but act as anti-inflammatory agents by sequestering agonists for actual signaling complexes. The type II IL-1 receptor (IL-1RII) acts as a decoy receptor for the chemokine interleukin-1 (IL-1). Additionally, the soluble form of IL-1R accessory protein (IL-1R AcP) increases the affinity of binding of IL-1 α and IL-1 β to IL-1RII 100-fold, but does not increase the affinity for another anti-inflammatory agent, IL-1R antagonist (IL-1R α). The end result is a complex regulatory mechanism for IL-1 activated inflammation, whereby dexamethasone and other molecules inducing IL-1RII, function in an immunosuppressive and anti-inflammatory manner.

REFERENCES

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8. Re, F., et al. 1994. The type II "receptor" as a decoy target for interleukin 1 in polymorphonuclear leukocytes: characterization of induction by dexamethasone and ligand binding properties of the released decoy receptor. *J. Exp. Med.* 179: 739-743.
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CHROMOSOMAL LOCATION

Genetic locus: IL1R2 (human) mapping to 2q11.2.

SOURCE

IL-1RII (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of IL-1RII of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27854 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-1RII (P-20) is recommended for detection of precursor and mature IL-1RII of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-1RII siRNA (h): sc-72042, IL-1RII shRNA Plasmid (h): sc-72042-SH and IL-1RII shRNA (h) Lentiviral Particles: sc-72042-V.

Molecular Weight of IL-1RII: 46 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Leung, K.W., et al. 2009. Bacterial endotoxin activates retinal pigment epithelial cells and induces their degeneration through IL-6 and IL-8 autocrine signaling. *Mol. Immunol.* 46: 1374-1386.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



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Try **IL-1RII (G-5): sc-376247** or **IL-1RII (6G5): sc-52678**, our highly recommended monoclonal alternatives to IL-1RII (P-20).