# SANTA CRUZ BIOTECHNOLOGY, INC.

# IL-1RII (H-71): sc-292522



# 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 $\alpha$  and IL-1 $\beta$  to IL-1RII 100-fold, but does not increase the affinity for another antiinflammatory agent, IL-1R antagonist (IL-1R $\alpha$ ). The end result is a complex regulatory mechanism for IL-1 activated inflammation, whereby dexamethasone and other molecules inducing IL-1RII, function in an immunosupressive and anti-inflammatory manner.

# REFERENCES

- 1. Sims, J.E., et al. 1989. Cloning of the interleukin-1 receptor from human T-cells. Proc. Natl. Acad. Sci. USA 86: 8946-8950.
- McMahan, C.J., 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.

#### CHROMOSOMAL LOCATION

Genetic locus: IL1R2 (human) mapping to 2q11.2. II1r2 (mouse) mapping to 1 B.

### SOURCE

IL-1RII (H-71) is a rabbit polyclonal antibody raised against amino acids 257-327 mapping near the C-terminus of IL-1RII of human origin.

### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

IL-1RII (H-71) is recommended for detection of IL-1RII of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

IL-1RII (H-71) is also recommended for detection of IL-1RII in additional species, including equine, canine and bovine.

Suitable for use as control antibody for IL-1RII siRNA (h): sc-72042, IL-1RII siRNA (m): sc-72043, IL-1RII shRNA Plasmid (h): sc-72042-SH, IL-1RII shRNA Plasmid (m): sc-72043-SH, IL-1RII shRNA (h) Lentiviral Particles: sc-72042-V and IL-1RII shRNA (m) Lentiviral Particles: sc-72043-V.

Molecular Weight of IL-1RII: 46 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



IL-1RII expression in HeLa (A) and Jurkat (B) whole cell lysates

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **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.

# MONOS Satisfation Guaranteed

Try IL-1RII (G-5): sc-376247 or IL-1RII (6G5):

sc-52678, our highly recommended monoclonal alternatives to IL-1RII (H-71).