

## IL-1RI (M-20): sc-689

### BACKGROUND

Three structurally related ligands for IL-1Rs have been described. These include two agonists, IL-1 $\alpha$  and IL-1 $\beta$ , and a specific receptor antagonist, IL-1R $\alpha$ . Among the activities regulated by IL-1 are fever, acute phase responses, degradation of connective tissue and immunostimulatory activities. The IL-1R $\alpha$  molecule also binds specifically to IL-1Rs, but fails to initiate intracellular responses. Two distinct IL-1Rs have been identified, each of which belongs to the Ig superfamily and is widely expressed in a broad range of cells and tissues. Although many cell types co-express type I and type II receptors, there is no evidence that these constitute subunits of a single complex. The type II receptor has a short 29 amino acid cytoplasmic domain that does not seem sufficient for signaling, while in fact there is considerable evidence arguing that IL-1 signals exclusively through the type I IL-1R.

### CHROMOSOMAL LOCATION

Genetic locus: Il1r1 (mouse) mapping to 1 B.

### SOURCE

IL-1RI (M-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of IL-1RI of mouse origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-689 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

IL-1RI (M-20) is recommended for detection of IL-1RI of 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).

Suitable for use as control antibody for IL-1RI siRNA (m): sc-35652, IL-1RI shRNA Plasmid (m): sc-35652-SH and IL-1RI shRNA (m) Lentiviral Particles: sc-35652-V.

Molecular Weight of IL-1RI: 80 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211.

### STORAGE

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

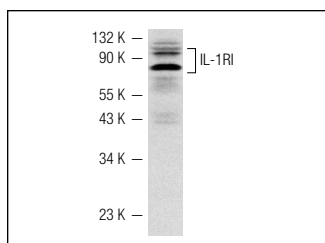
### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

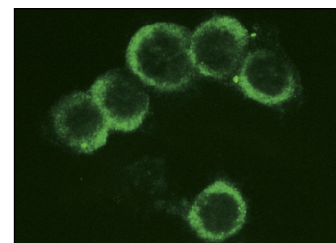
### RESEARCH USE

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

### DATA



IL-1RI (M-20): sc-689. Western blot analysis of IL-1RI expression in RAW 264.7 whole cell lysate.



IL-1RI (M-20): sc-689. Immunofluorescence staining of methanol-fixed RAW 264.7 cells showing membrane localization.

### SELECT PRODUCT CITATIONS

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- Deng, Y.Y., et al. 2010. Microglia-derived macrophage colony stimulating factor promotes generation of proinflammatory cytokines by astrocytes in the periventricular white matter in the hypoxic neonatal brain. *Brain Pathol.* 20: 909-925.
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