

# SIGIRR (N-13): sc-47408

## BACKGROUND

Single Ig IL-1-related receptor SIGIRR, also designated single immunoglobulin domain-containing IL-1R-related protein or Toll/interleukin-1 receptor 8 (TIR8), is a member of the interleukin-1 receptor family. SIGIRR acts as a negative regulator of the IL-1R and Toll-like receptor signaling pathways and reduces the recruitment of certain components to the TLR4 receptor. Subsequently, SIGIRR confers resistance to *P. aeruginosa* corneal infection. SIGIRR can form complexes with IL-1R1, MYD-88, IRAK-1 and TRAF-6 upon IL-1 stimulation and TLR4 after LPS stimulation. It is a single-pass type III membrane protein that is mainly expressed in kidney, lung and gut.

## REFERENCES

1. Thomassen, E., et al. 1999. Identification and characterization of SIGIRR, a molecule representing a novel subtype of the IL-1R superfamily. *Cytokine* 11: 389-399.
2. Wald, D., et al. 2003. SIGIRR, a negative regulator of Toll-like receptor-interleukin 1 receptor signaling. *Nat. Immunol.* 4: 920-927.

## CHROMOSOMAL LOCATION

Genetic locus: SIGIRR (human) mapping to 11p15.5; Sigirr (mouse) mapping to 7 F5.

## SOURCE

SIGIRR (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SIGIRR of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-47408 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SIGIRR (N-13) is recommended for detection of SIGIRR 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 µg per 100-500 µg 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 SIGIRR siRNA (h): sc-61547, SIGIRR siRNA (m): sc-61548, SIGIRR shRNA Plasmid (h): sc-61547-SH, SIGIRR shRNA Plasmid (m): sc-61548-SH, SIGIRR shRNA (h) Lentiviral Particles: sc-61547-V and SIGIRR shRNA (m) Lentiviral Particles: sc-61548-V.

Molecular Weight of unglycosylated SIGIRR: 46/55 kDa.

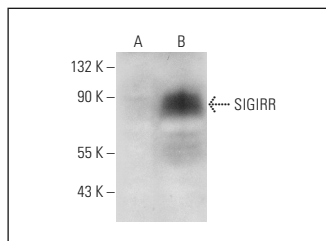
Molecular Weight of glycosylated SIGIRR: 65-90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or SIGIRR (h): 293T Lysate: sc-111731.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



SIGIRR (N-13): sc-47408. Western blot analysis of SIGIRR expression in non-transfected: sc-117752 (A) and human SIGIRR transfected: sc-111731 (B) 293T whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **SIGIRR (A-4): sc-271864** or **SIGIRR (D-2): sc-365601**, our highly recommended monoclonal alternatives to SIGIRR (N-13).