

# SIGIRR (H-186): sc-98976

## 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 (H-186) is a rabbit polyclonal antibody raised against amino acids 225-410 mapping within a C-terminal cytoplasmic domain 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.

## APPLICATIONS

SIGIRR (H-186) is recommended for detection of SIGIRR of mouse, rat and human 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).

SIGIRR (H-186) is also recommended for detection of SIGIRR in additional species, including bovine and porcine.

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.

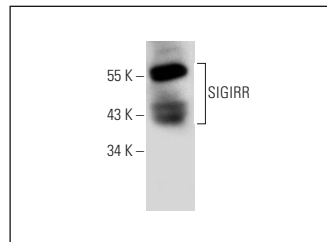
Molecular Weight of glycosylated SIGIRR: 65-90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or Caki-1 cell lysate: sc-2224.

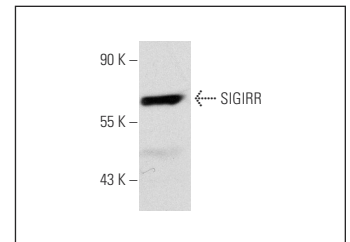
## RECOMMENDED SECONDARY REAGENTS

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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™ Mounting Medium: sc-24941.

## DATA



SIGIRR (H-186): sc-98976. Western blot analysis of SIGIRR expression in A549 whole cell lysate.



SIGIRR (H-186): sc-98976. Western blot analysis of SIGIRR expression in HeLa whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Yadav, V.R., et al. 2014. Hemorrhage-induced interleukin-1 receptor pathway in lung is suppressed by 3,5-bis(2-fluorobenzylidene)-4-piperidone in a rat model of hypovolemic shock. *Artif. Organs* 38: 675-683.

## 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **SIGIRR (A-4): sc-271864** or **SIGIRR (D-2): sc-365601**, our highly recommended monoclonal alternatives to SIGIRR (H-186).