

SIGIRR (C-18): sc-47406

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., Renshaw, B.R. and Sims, J.E. 1999. Identification and characterization of SIGIRR, a molecule representing a novel subtype of the IL-1R superfamily. *Cytokine* 11: 389-399.
2. Wald, D., Qin, J., Zhao, Z., Qian, Y., Naramura, M., Tian, L., Towne, J., Sims, J.E., Stark, G.R. and Li, X. 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 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-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-47406 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SIGIRR (C-18) 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).

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.

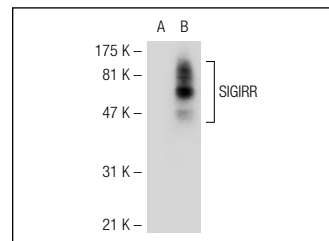
Molecular Weight of glycosylated SIGIRR: 65-90 kDa.

Positive Controls: SIGIRR (h): 293T Lysate: sc-111731, 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 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 (C-18): sc-47406. 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 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 (C-18).