

# cytohesin-1 (C-19): sc-9734

## BACKGROUND

Cytohesin-1 is an ARF guanine nucleotide exchange factor (GEF). Cytohesin-1 contains a phospholipid-binding C-terminal pleckstrin homology (PH) domain, a central Sec7 domain, and an N-terminal coiled-coil region. The PH domain binds to phosphatidylinositol 3,4,5-triphosphate (PtdIns-3,4,5-P<sub>3</sub>), a phosphatidylinositol 3-kinase (PI-3-kinase) metabolite. The Sec7 domain is responsible for GDP/GTP exchange activity and brefeldin A inhibition. Cytohesin-1 catalyzes *in vitro* nucleotide exchange on ARF1 and ARF3, but it has no effect on ARF6. Additionally, cytohesin-1 is a regulatory factor for the  $\alpha$ L $\beta$ 2 integrin in lymphocytes. Through interaction with integrins, cytohesin-1 may participate in inside-out cell signaling.

## REFERENCES

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- Meacci, E., Tsai, S.-C., Adamik, R., Moss, J. and Vaughan, M. 1997. Cytohesin-1, a cytosolic guanine nucleotide-exchange protein for ADP-ribosylation factor. *Proc. Natl. Acad. Sci. USA* 94: 1745-1748.
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- Sata, M., Donaldson, J.G., Moss, J. and Vaughan, M. 1998. Brefeldin A inhibited guanine nucleotide-exchange activity of Sec7 domain from yeast Sec7 with yeast and mammalian ADP ribosylation factors. *Proc. Natl. Acad. Sci. USA* 95: 4204-4208.
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## SOURCE

cytohesin-1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of cytohesin-1 of human 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-9734 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

cytohesin-1 (C-19) is recommended for detection of cytohesin-1 of mouse, rat and human 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).

cytohesin-1 (C-19) is also recommended for detection of cytohesin-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for cytohesin-1 siRNA (h): sc-40470, cytohesin-1 siRNA (m): sc-40471, cytohesin-1 shRNA Plasmid (h): sc-40470-SH, cytohesin-1 shRNA Plasmid (m): sc-40471-SH, cytohesin-1 shRNA (h) Lentiviral Particles: sc-40470-V and cytohesin-1 shRNA (m) Lentiviral Particles: sc-40471-V.

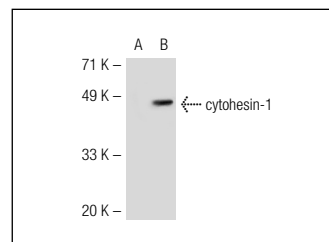
Molecular Weight of cytohesin-1: 50 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or cytohesin-1 (h): 293T Lysate: sc-116153.

## 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



cytohesin-1 (C-19): sc-9734. Western blot analysis of cytohesin-1 expression in non-transfected: sc-117752 (A) and human cytohesin-1 transfected: sc-116153 (B) 293T whole cell lysates.

## 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.