

cytohesin-1 (CYT1-82): sc-59491

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-P₃), 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 α L β 2 Integrin in lymphocytes. Through interaction with integrins, cytohesin-1 may participate in inside-out cell signaling.

REFERENCES

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- Kolanus, W., Nagel, W., Schiller, B., Zeitlmann, L., Godar, S., Stockinger, H. and Seed, B. 1996. α L β 2 Integrin/LFA-1 binding to ICAM-1 induced by cytohesin-1, a cytoplasmic regulatory molecule. *Cell* 86: 233-242.
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CHROMOSOMAL LOCATION

Genetic locus: CYTH1 (human) mapping to 17q25.3.

SOURCE

cytohesin-1 (CYT1-82) is a mouse monoclonal antibody raised against full length cytohesin-1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

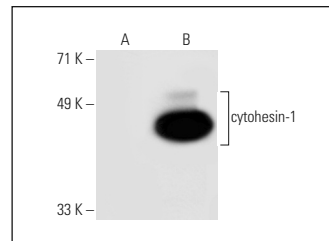
cytohesin-1 (CYT1-82) is recommended for detection of cytohesin-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other members of the cytohesin family.

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

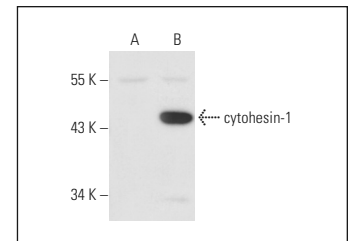
Molecular Weight of cytohesin-1: 50 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2200 or cytohesin-1 (h): 293T Lysate: sc-116153.

DATA



cytohesin-1 (CYT1-82): sc-59491. 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.



cytohesin-1 (CYT1-82): sc-59491. Western blot analysis of cytohesin-1 expression in non-transfected: sc-117752 (A) and mouse cytohesin-1 transfected: sc-125210 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Chakraborti, S., Sarkar, J., Chowdhury, A. and Chakraborti, T. 2017. Role of ADP ribosylation factor6- Cytohesin1-PhospholipaseD signaling axis in U46619 induced activation of NADPH oxidase in pulmonary artery smooth muscle cell membrane. *Arch. Biochem. Biophys.* 633: 1-14.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.