

cytohesin-1 (h): 293T Lysate: sc-116153

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

REFERENCES

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2. 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.
3. 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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5. 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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CHROMOSOMAL LOCATION

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

PRODUCT

cytohesin-1 (h): 293T Lysate represents a lysate of human cytohesin-1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

cytohesin-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive cytohesin-1 antibodies. Recommended use: 10-20 μ l per lane.

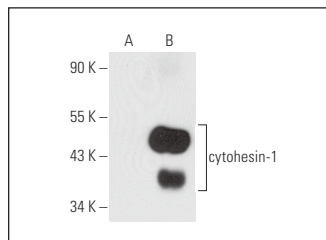
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

cytohesin-1/2 (D-11): sc-166542 is recommended as a positive control antibody for Western Blot analysis of enhanced human cytohesin-1 expression in cytohesin-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

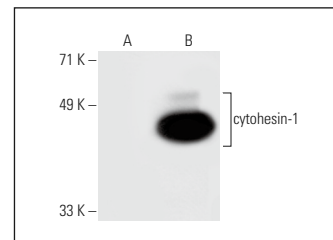
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



cytohesin-1/2 (D-11): sc-166542. 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 human cytohesin-1 transfected: sc-116153 (B) 293T whole cell lysates.

PROTOCOLS

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