

cytohesin-2 (H-37): sc-292564

BACKGROUND

Cytohesin-2, also known as ARNO (ARF nucleotide-binding-site opener), is an ARF-1 guanine nucleotide exchange factor (GEF). ARF (ADP Ribosylation factor) proteins, a group within the RAS superfamily, are GTP-binding proteins central to the process of vesicle budding. Cytohesin-2 contains an N-terminal coiled-coil domain, a Sec7 domain responsible for GDP/GTP exchange activity, and a C-terminal Pleckstrin homology (PH) domain responsible for binding to PIP2. GEF activity of cytohesin-2 is enhanced by binding of the PH domain to phosphatidylinositol 4,5-bisphosphate which recruits cytohesin-2 to membranes. Cytohesin-2 is localized to the plasma membrane in mammalian cells and *in vitro* cytohesin-2 stimulates nucleotide exchange on ARF1 and ARF6.

REFERENCES

1. Kahn, R.A. and Gilman, A.G. 1984. Purification of a protein cofactor required for ADP-ribosylation of the stimulatory regulatory component of adenylate cyclase by cholera toxin. *J. Biol. Chem.* 259: 6228-6234.
2. Moss, J. and Vaughan, M. 1995. Structure and function of ARF proteins: activators of cholera toxin and critical components of intracellular vesicular transport processes. *J. Biol. Chem.* 270: 12327-12330.

CHROMOSOMAL LOCATION

Genetic locus: CYTH2 (human) mapping to 19q13.33; Cyth2 (mouse) mapping to 7 B4.

SOURCE

cytohesin-2 (H-37) is a rabbit polyclonal antibody raised against amino acids 31-67 mapping near the N-terminus of cytohesin-2 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

cytohesin-2 (H-37) is recommended for detection of cytohesin-2 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).

cytohesin-2 (H-37) is also recommended for detection of cytohesin-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for cytohesin-2 siRNA (h): sc-40468, cytohesin-2 siRNA (m): sc-40469, cytohesin-2 shRNA Plasmid (h): sc-40468-SH, cytohesin-2 shRNA Plasmid (m): sc-40469-SH, cytohesin-2 shRNA (h) Lentiviral Particles: sc-40468-V and cytohesin-2 shRNA (m) Lentiviral Particles: sc-40469-V.

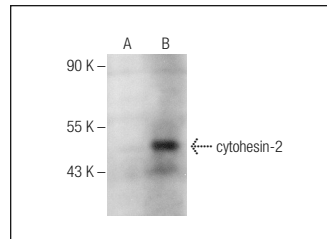
Molecular Weight of cytohesin-2: 47 kDa.

Positive Controls: cytohesin-2 (h): 293T Lysate: sc-176453.

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



cytohesin-2 (H-37): sc-292564. Western blot analysis of cytohesin-2 expression in non-transfected: sc-117752 (A) and human cytohesin-2 transfected: sc-176453 (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.

MONOS
Satisfaction
Guaranteed

Try **cytohesin-1/2 (D-11): sc-166542** or **cytohesin-2 (H-7): sc-374640**, our highly recommended monoclonal alternatives to cytohesin-2 (H-37).