

cytohesin-2 (N-20): sc-9727

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 Sec 7 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.

CHROMOSOMAL LOCATION

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

SOURCE

cytohesin-2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at 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.

Blocking peptide available for competition studies, sc-9727 P, (100 µg 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-2 (N-20) 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), immunohistochemistry (including paraffin-embedded sections) (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 (N-20) is also recommended for detection of cytohesin-2 in additional species, including 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.

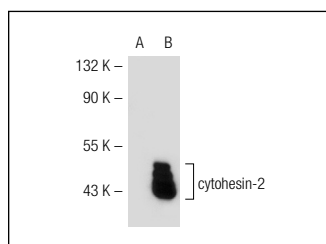
Molecular Weight of cytohesin-2: 47 kDa.

Positive Controls: cytohesin-2 (m): 293T Lysate: sc-126697.

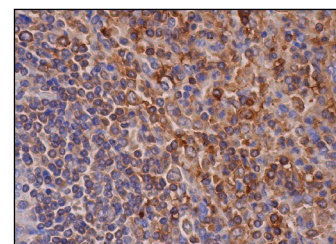
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



cytohesin-2 (N-20): sc-9727. Western blot analysis of cytohesin-2 expression in non-transfected: sc-117752 (A) and mouse cytohesin-2 transfected: sc-126697 (B) 293T whole cell lysates.



cytohesin-2 (N-20): sc-9727. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white pulp and cells in red pulp.

SELECT PRODUCT CITATIONS

- Mannell, H.K., et al. 2012. ARNO regulates VEGF-dependent tissue responses by stabilizing endothelial VEGFR-2 surface expression. *Cardiovasc. Res.* 93: 111-119.

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 **cytohesin-1/2 (D-11): sc-166542** or **cytohesin-2 (H-7): sc-374640**, our highly recommended monoclonal alternatives to cytohesin-2 (N-20).