

Goat Anti-ARNO / cytohesin 2 Antibody

Peptide-affinity purified goat antibody Catalog # AF1105a

Specification

Goat Anti-ARNO / cytohesin 2 Antibody - Product Information

Application WB

Primary Accession <u>Q99418</u>

Other Accession NP_059431, 9266, 19158 (mouse), 116692 (rat)

Reactivity Human, Rat
Predicted Mouse, Dog
Host Goat

Clonality Polyclonal Concentration 100ug/200ul

Isotype IgG
Calculated MW 46546

Goat Anti-ARNO / cytohesin 2 Antibody - Additional Information

Gene ID 9266

Other Names

Cytohesin-2, ARF exchange factor, ARF nucleotide-binding site opener, Protein ARNO, PH, SEC7 and coiled-coil domain-containing protein 2, CYTH2, ARNO, PSCD2, PSCD2L

Format

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-ARNO / cytohesin 2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ARNO / cytohesin 2 Antibody - Protein Information

Name CYTH2 (HGNC:9502)

Synonyms ARNO, PSCD2, PSCD2L

Function

Acts as a guanine-nucleotide exchange factor (GEF). Promotes guanine-nucleotide exchange on ARF1, ARF3 and ARF6. Activates ARF factors through replacement of GDP with GTP (By similarity). The cell membrane form, in association with ARL4 proteins, recruits ARF6 to the plasma



membrane (PubMed:17398095). Involved in neurite growth (By similarity).

Cellular Location

Cell membrane; Peripheral membrane protein. Cytoplasm. Cell projection

{ECO:0000250|UniProtKB:P63034}. Cell projection, growth cone

{ECO:0000250|UniProtKB:P63034}. Cell junction, tight junction

{ECO:0000250|UniProtKB:P63034}. Cell junction, adherens junction

{ECO:0000250|UniProtKB:P63034}. Note=Both isoform 1 and isoform 2 are recruited to the cell membrane through its association with ARL4A, ARL4C and ARL4D. They require also interaction with phosphoinositides for targeting to plasma membrane (PubMed:17398095). In differentiating neuroblastoma cells, colocalizes with CCDC120 in both neurite shaft and growth cone areas. {ECO:0000250|UniProtKB:P63034, ECO:0000269|PubMed:17398095}

Tissue Location

Widely expressed..

Goat Anti-ARNO / cytohesin 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-ARNO / cytohesin 2 Antibody - Images



AF1105a (0.5 μ g/ml) staining of Human Brain (Cerebellum) lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ARNO / cytohesin 2 Antibody - Background

The protein encoded by this gene is a member of the PSCD family. Members of this family have identical structural organization that consists of an N-terminal coiled-coil motif, a central Sec7 domain, and a C-terminal pleckstrin homology (PH) domain. The coiled-coil motif is involved in homodimerization, the Sec7 domain contains guanine-nucleotide exchange protein (GEP) activity,





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and the PH domain interacts with phospholipids and is responsible for association of PSCDs with membranes. Members of this family appear to mediate the regulation of protein sorting and membrane trafficking. The encoded protein exhibits GEP activity in vitro with ARF1, ARF3, and ARF6 and is 83% homologous to CYTH1. Two transcript variants encoding different isoforms have been found for this gene.

Goat Anti-ARNO / cytohesin 2 Antibody - References

Cytohesin-2/ARNO, through its interaction with focal adhesion adaptor protein paxillin, regulates preadipocyte migration via the downstream activation of Arf6. Torii T, et al. | Biol Chem, 2010 Jul 30. PMID 20525696.

Specific motifs of the V-ATPase a2-subunit isoform interact with catalytic and regulatory domains of ARNO. Merkulova M, et al. Biochim Biophys Acta, 2010 Aug. PMID 20153292.

GRASP and IPCEF promote ARF-to-Rac signaling and cell migration by coordinating the association of ARNO/cytohesin 2 with Dock180. White DT, et al. Mol Biol Cell, 2010 Feb 15. PMID 20016009. Identification of a quanine nucleotide exchange factor for Arf3, the yeast orthologue of mammalian Arf6. Gillingham AK, et al. PLoS One, 2007 Sep 5. PMID 17786213.

The calcium-sensing receptor changes cell shape via a beta-arrestin-1 ARNO ARF6 ELMO protein network. Bouschet T, et al. J Cell Sci, 2007 Aug 1. PMID 17623778.