

ARMS (C-20): sc-324829

BACKGROUND

Ankyrin repeat-rich membrane-spanning protein (ARMS), also designated kinase D-interacting substance 220 or Kidins220, is a highly conserved, 1,715 amino acid protein containing multiple domains, including 4 putative transmembrane domains and several ankyrin repeats. ARMS is expressed in regions rich in neurotrophin (Trk) and ephrin (Eph) receptors, such as the brain and neuroendocrine cells (where it concentrates at the tip of neurites) and in plastic areas of the adult brain. It is also detected in peripheral blood immature dendritic cells and PC12 cells. ARMS functions as a substrate for protein kinase D and is a downstream target for both Trk and Eph receptors. It is a highly conserved protein, which suggests it has an evolutionary conserved role. The gene encoding for the protein maps to chromosome 2p25.1.

REFERENCES

1. Iglesias, T., et al. 2000. Identification and cloning of Kidins220, a novel neuronal substrate of protein kinase D. *J. Biol. Chem.* 275: 40048-40056.
2. Kong, H., et al. 2001. An evolutionarily conserved transmembrane protein that is a novel downstream target of neurotrophin and ephrin receptors. *J. Neurosci.* 21: 176-185.
3. Arevalo, J.C., et al. 2004. A unique pathway for sustained neurotrophin signaling through an ankyrin-rich membrane-spanning protein. *EMBO J.* 23: 2358-2368.
4. Riol-Blanco, L., et al. 2004. The neuronal protein Kidins220 localizes in a raft compartment at the leading edge of motile immature dendritic cells. *Eur. J. Immunol.* 34: 108-118.
5. Luo, S., et al. 2005. α -Syntrophin regulates ARMS localization at the neuromuscular junction and enhances EphA4 signaling in an ARMS-dependent manner. *J. Cell Biol.* 169: 813-824.
6. <http://harvester.embl.de/harvester/Q9UL/Q9ULH0.htm>

CHROMOSOMAL LOCATION

Genetic locus: KIDINS220 (human) mapping to 2p25.1; Kidins220 (mouse) mapping to 12 A1.3.

SOURCE

ARMS (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of ARMS of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-324829 P, (100 μ g 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

ARMS (C-20) is recommended for detection of ARMS of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

ARMS (C-20) is also recommended for detection of ARMS in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for ARMS siRNA (h): sc-44511, ARMS siRNA (m): sc-44512, ARMS shRNA Plasmid (h): sc-44511-SH, ARMS shRNA Plasmid (m): sc-44512-SH, ARMS shRNA (h) Lentiviral Particles: sc-44511-V and ARMS shRNA (m) Lentiviral Particles: sc-44512-V.

Molecular Weight of ARMS isoforms: 173-220 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.