

ARMS (R-300): sc-48738

BACKGROUND

Ankyrin repeat-rich membrane-spanning protein (ARMS), also designated kinase D-interacting substance 220 (Kidins220), is a highly conserved, 1715 amino acid protein containing multiple domains, including four putative transmembrane domains and several ankyrin repeats. ARMS is expressed in regions that are 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. ARMS can be detected in PC12 cells. It functions as a substrate for protein kinase D and is a downstream target for both Trk and Eph receptors. ARMS 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. Riolo-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.

CHROMOSOMAL LOCATION

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

SOURCE

ARMS (R-300) is a rabbit polyclonal antibody raised against amino acids 1463-1762 mapping at the C-terminus of ARMS of rat origin.

PRODUCT

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

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.

APPLICATIONS

ARMS (R-300) is recommended for detection of ARMS of rat origin and Kidins220 of human and mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

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.

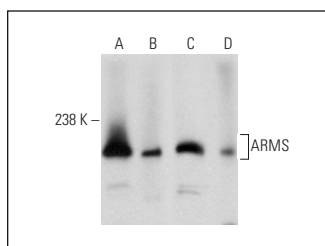
Molecular Weight of ARMS: 173-220 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or Raji whole cell lysate: sc-364236.

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



ARMS (R-300): sc-48738. Western blot analysis of ARMS expression in K-562 (A), HeLa (B) and Raji (C) whole cell lysates and rat brain tissue extract (D).

PROTOCOLS

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Try **ARMS (26): sc-136462**, our highly recommended monoclonal alternative to ARMS (R-300).