

ArgBP2 (H-75): sc-292653

BACKGROUND

Arg and c-Abl represent the mammalian members of the Abelson family of non-receptor protein-tyrosine kinases. They interact with the Arg/Abl binding proteins (ArgBPs) via SH3 domains present in the carboxy-terminus of the ArgBPs. One member of the Arg/Abl binding protein family, ArgBP2, is expressed in epithelial and cardiac muscle cells. The subcellular localization of ArgBP2 suggests that it functions as an adapter protein in the assembly of signaling complexes in stress fibers and that it is a potential link between Abl family kinases and the Actin cytoskeleton. The human ArgBP2 gene, which maps to chromosome 4, encodes multiple transcripts that yield different isoforms of ArgBP2. Isoforms ArgBP2a and ArgBP2b differ at the 5' end but have the same carboxy-terminal sequence, containing three SH3 domains. Another member of the ArgBP family, nArgBP2, which is specifically expressed in neural tissue, has the carboxy terminal SH3 domains characteristic of Arg/Abl binding proteins, as well as a sorbin homology domain near the N-terminus and a zinc finger motif in the middle region of the protein. nArgBP2 interacts with the proline-rich region of SAPAP via its third SH3 domain. In rat brain, nArgBP2 co-localizes with SAPAP at the synapses of the

REFERENCES

1. Kruh, G.D., et al. 1990. The complete coding sequence of arg defines the Abelson subfamily of cytoplasmic tyrosine kinases. *Proc. Natl. Acad. Sci. USA* 87: 5802-5806.
2. Wang, B., et al. 1997. ArgBP2, a multiple Src homology 3 domain-containing, Arg/Abl-interacting protein, is phosphorylated in v-Abl-transformed cells and localized in stress fibers and cardiocyte Z-disks. *J. Biol. Chem.* 272: 17542-17550.
3. Kawabe, H., et al. 1999. nArgBP2, a novel neural member of ponsin/ArgBP2/vinexin family that interacts with synapse-associated protein 90/postsynaptic density-95-associated protein (SAPAP). *J. Biol. Chem.* 274: 30914-30918.
4. Hirao, K., et al. 2000. Association of synapse-associated protein 90/ postsynaptic density-95-associated protein (SAPAP) with neurofilaments. *Genes Cells* 5: 203-210.
5. LocusLink Report (LocusID: 8470). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: SORBS2 (human) mapping to 4q35.1; Sorbs2 (mouse) mapping to 8 B1.1.

SOURCE

ArgBP2 (H-75) is a rabbit polyclonal antibody raised against amino acids 1-75 mapping at the N-terminus of ArgBP2 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

ArgBP2 (H-75) is recommended for detection of ArgBP2 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).

ArgBP2 (H-75) is also recommended for detection of ArgBP2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ArgBP2 siRNA (h): sc-40336, ArgBP2 siRNA (m): sc-141193, ArgBP2 shRNA Plasmid (h): sc-40336-SH, ArgBP2 shRNA Plasmid (m): sc-141193-SH, ArgBP2 shRNA (h) Lentiviral Particles: sc-40336-V and ArgBP2 shRNA (m) Lentiviral Particles: sc-141193-V.

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.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.