

ArgBP2 (H-15): sc-14134

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 end 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. 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 colocalizes with SAPAP at the synapses of the cerebellum.

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 phospho-rylated 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: ARGBP2 (human) mapping to 4q35.1.

SOURCE

ArgBP2 (H-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near 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.

Blocking peptide available for competition studies, sc-14134 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

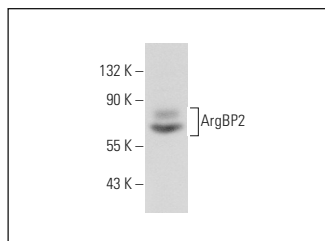
ArgBP2 (H-15) is recommended for detection of ArgBP2, ArgBP2a and ArgBP2b of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution 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).

ArgBP2 (H-15) is also recommended for detection of ArgBP2, ArgBP2a and ArgBP2b in additional species, including porcine.

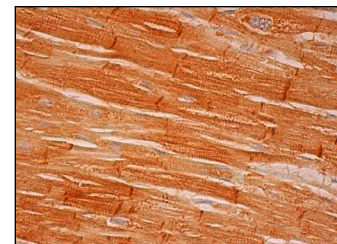
Suitable for use as control antibody for ArgBP2 siRNA (h): sc-40336, ArgBP2 shRNA Plasmid (h): sc-40336-SH and ArgBP2 shRNA (h) Lentiviral Particles: sc-40336-V.

Positive Controls: HEK293 whole cell lysate: sc-45136.

DATA



ArgBP2 (H-15): sc-14134. Western blot analysis of ArgBP2 expression in HEK293 whole cell lysate.



ArgBP2 (H-15): sc-14134. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing intercalated disc and cytoplasmic staining of myocytes.

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.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **ArgBP2 (B-11): sc-514671**, our highly recommended monoclonal alternative to ArgBP2 (H-15).