

ABI2 Antibody (N-term) Blocking peptide Synthetic peptide Catalog # BP12566a

Specification

ABI2 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

<u>Q9NYB9</u>

ABI2 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 10152

Other Names

Abl interactor 2, Abelson interactor 2, Abi-2, Abl-binding protein 3, AblBP3, Arg-binding protein 1, ArgBP1, ABI2, ARGBPIA

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ABI2 Antibody (N-term) Blocking peptide - Protein Information

Name ABI2 {ECO:0000303|PubMed:28397838, ECO:0000312|HGNC:HGNC:24011}

Function

Regulator of actin cytoskeleton dynamics underlying cell motility and adhesion. Functions as a component of the WAVE complex, which activates actin nucleating machinery Arp2/3 to drive lamellipodia formation (PubMed:21107423). Acts as a regulator and substrate of nonreceptor tyrosine kinases ABL1 and ABL2 involved in processes linked to cell growth and differentiation. Positively regulates ABL1-mediated phosphorylation of ENAH, which is required for proper polymerization of nucleated actin filaments at the leading edge (PubMed:7590236, PubMed:8649853, PubMed:10498863). Contributes to the regulation of actin assembly at the tips of neuron projections. In particular, controls dendritic spine morphogenesis and may promote dendritic spine specification toward large mushroom-type spines known as repositories of memory in the brain (By similarity). In hippocampal neurons, may mediate actin-dependent BDNF-NTRK2 early endocytic trafficking that triggers dendrite outgrowth (By similarity). Participates in ocular lens morphogenesis, likely by regulating lamellipodia-driven adherens junction formation at the epithelial cell-secondary lens fiber interface (By similarity). Also required for nascent adherens junction assembly in epithelial



cells (PubMed:15572692).

Cellular Location Cytoplasm. Nucleus

Tissue Location

Widely expressed. Abundant in testes, ovary, thymus, and colon, with lower but detectable levels in prostate, peripheral blood leukocytes, and spleen.

ABI2 Antibody (N-term) Blocking peptide - Protocols

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

Blocking Peptides

ABI2 Antibody (N-term) Blocking peptide - Images

ABI2 Antibody (N-term) Blocking peptide - Background

ABI2 may act in regulation of cell growth and transformation by interacting with nonreceptor tyrosine kinases ABL1 and/or ABL2. May be involved in cytoskeletal reorganization. Regulates ABL1/c-Abl-mediated phosphorylation of MENA.

ABI2 Antibody (N-term) Blocking peptide - References

Ryu, J.R., et al. Mol. Cell. Biol. 29(7):1735-1748(2009)Kano, S., et al. Cancer Res. 68(14):5572-5580(2008)Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)Li, Y., et al. J. Cell. Sci. 120 (PT 8), 1436-1446 (2007) :O'Donnell, C.J., et al. BMC Med. Genet. 8 SUPPL 1, S4 (2007) :