

ABI2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12566A

Specification

ABI2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region FC, WB,E <u>O9NYB9</u> <u>P62484</u>, <u>NP_005750.4</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 55663 1-30

ABI2 Antibody (N-term) - 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

Target/Specificity

This ABI2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human ABI2.

Dilution FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ABI2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ABI2 Antibody (N-term) - 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:<u>21107423</u>). 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:<u>10498863</u>, PubMed:<u>7590236</u>, PubMed:<u>8649853</u>). 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:<u>15572692</u>).

Cellular Location Cytoplasm. Nucleus

Tissue Location

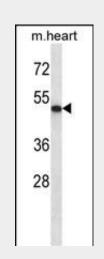
Widely expressed. Abundant in testes, ovary, thymus, and colon, with lower but detectable levels in prostate, peripheral blood leukocytes, and spleen.

ABI2 Antibody (N-term) - Protocols

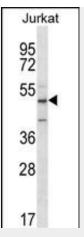
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

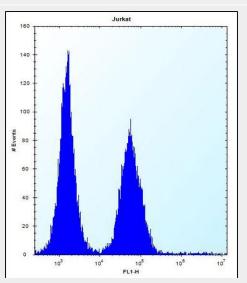
ABI2 Antibody (N-term) - Images



ABI2 Antibody (N-term) (Cat. #AP12566a) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the ABI2 antibody detected the ABI2 protein (arrow).



ABI2 Antibody (N-term) (Cat. #AP12566) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the ABI2 antibody detected the ABI2 protein (arrow).



ABI2 Antibody (N-term) (Cat. #AP12566a) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

ABI2 Antibody (N-term) - 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) - 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) :