

ABI2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58354

Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession

Reactivity
Rat, Pig, Dog
Host
Clonality
Polyclonal
Calculated MW
55663
Physical State
Liquid

Immunogen KLH conjugated synthetic peptide derived from human ABI2

Epitope Specificity 421-513/513

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm (By similarity). Isoform 1: Cell projection, lamellipodium (By

similarity). Cell projection, filopodium (By similarity). Cytoplasm, cytoskeleton (By similarity). Note=Isoform 1 but not isoform 3 is localized to protruding

lamellipodia and filopodia tips (By similarity).

SIMILARITY Belongs to the ABI family. Contains 1 SH3 domain. Contains 1 t-SNARE

coiled-coil homology domain.

Post-translational modifications

anslational Is a substrate for ABL1.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions ABI2 (Abelson interactor 2) belongs to the ABI family. The Abelson interactors

are among a group of proteins that interact with Abl tyrosine kinase, a non-receptor tyrosine kinase whose activation results in the regulation of cytoskeleton function, cell growth and apoptosis in response to a variety of

biological stimuli.

Additional Information

Gene ID 10152

Other Names Abl interactor 2 {ECO:0000303 | Ref.16}, Abelson interactor 2

{ECO:0000303 | Ref.16}, Abi-2, Abl-binding protein 3, AblBP3, Arg-binding

protein 1, ArgBP1, ABI2 {ECO:0000303 | PubMed:28397838,

ECO:0000312 | HGNC:HGNC:24011}

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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: 10498863, PubMed: 7590236, PubMed:8649853). 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).

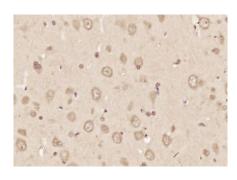
Cellular Location

Cytoplasm. Nucleus

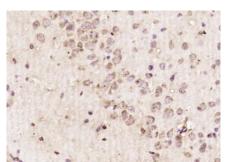
Tissue Location

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

Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ABI2) Polyclonal Antibody, Unconjugated (AP58354) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ABI2) Polyclonal Antibody, Unconjugated (AP58354) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.