

### **ABI2 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58354

### **Specification**

### **ABI2 Polyclonal Antibody - Product Information**

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

Primary Accession
Reactivity
Rost
Clonality
Calculated MW
Physical State

Rat, Pig, Dog
Rabbit
Polyclonal
56 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

from human ABI2

Epitope Specificity 421-513/513

Isotype IgG

Purity

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 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**

affinity purified by Protein A

ABI2 (Abelson interactor 2) belongs to the ABI family. The Abelson interactors are among a group of proteins that interact with AbI 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.

# **ABI2 Polyclonal Antibody - 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**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution\_IF">IF~~1:50~200</span><br \> <span class ="dilution\_E">E~~N/A</span>

#### **Storage**

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.

#### **ABI2 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/21107423" target="\_blank">21107423</a>). 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:<a

href="http://www.uniprot.org/citations/10498863" target="\_blank">10498863</a>, PubMed:<a href="http://www.uniprot.org/citations/7590236" target="\_blank">7590236</a>, PubMed:<a href="http://www.uniprot.org/citations/8649853" target="\_blank">8649853</a>). 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:<a href="http://www.uniprot.org/citations/15572692" target="blank">15572692</a>).

## **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 Polyclonal Antibody - Protocols**

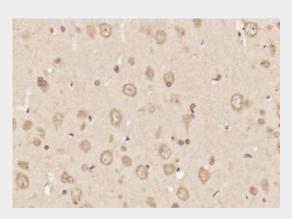
Provided below are standard protocols that you may find useful for product applications.

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

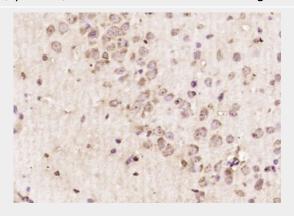


#### • Cell Culture

### **ABI2 Polyclonal Antibody - 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 (bs-5984R) 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 (bs-5984R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.