

Anti-ABI1 Antibody

Catalog # ABO10496

Specification

Anti-ABI1 Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format **Description** Rabbit IgG polyclonal WB, IHC-P, ICC <u>O8IZP0</u> Rabbit Human, Mouse, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for Abl interactor 1(ABI1) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ABI1 Antibody - Additional Information

Gene ID 10006

Other Names Abl interactor 1, Abelson interactor 1, Abi-1, Abl-binding protein 4, AblBP4, Eps8 SH3 domain-binding protein, Eps8-binding protein, Nap1-binding protein, Nap1BP, Spectrin SH3 domain-binding protein 1, e3B1, ABI1, SSH3BP1

Calculated MW 55081 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat

Immunocytochemistry, 0.5-1 μg/ml, Human, -
Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization

Cytoplasm . Nucleus . Cell projection, lamellipodium . Cell projection, filopodium . Cell projection, growth cone . Cell junction, synapse, postsynaptic cell membrane, postsynaptic density . Cytoplasm, cytoskeleton . Localized to protruding lamellipodia and filopodia tips. Also localized to neuronal growth cones and synaptosomes. May shuttle from the postsynaptic densities to the nucleus (By similarity).

Tissue Specificity Widely expressed, with highest expression in brain. .

Protein Name Abl interactor 1

Contents



Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ABI1 (483-494aa WYEGVCNRVTGL), different from the related rat and mouse sequences by one amino acid.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-ABI1 Antibody - Protein Information

Name ABI1 (HGNC:11320)

Synonyms SSH3BP1

Function

May act in negative regulation of cell growth and transformation by interacting with nonreceptor tyrosine kinases ABL1 and/or ABL2. May play a role in regulation of EGF-induced Erk pathway activation. Involved in cytoskeletal reorganization and EGFR signaling. Together with EPS8 participates in transduction of signals from Ras to Rac. In vitro, a trimeric complex of ABI1, EPS8 and SOS1 exhibits Rac specific guanine nucleotide exchange factor (GEF) activity and ABI1 seems to act as an adapter in the complex. Regulates ABL1/c-Abl- mediated phosphorylation of ENAH. Recruits WASF1 to lamellipodia and there seems to regulate WASF1 protein level. In brain, seems to regulate the dendritic outgrowth and branching as well as to determine the shape and number of synaptic contacts of developing neurons.

Cellular Location

Cytoplasm. Nucleus. Cell projection, lamellipodium. Cell projection, filopodium. Cell projection, growth cone Postsynaptic density. Cytoplasm, cytoskeleton. Note=Localized to protruding lamellipodia and filopodia tips. Also localized to neuronal growth cones and synaptosomes. May shuttle from the postsynaptic densities to the nucleus (By similarity)

Tissue Location Widely expressed, with highest expression in brain.

Anti-ABI1 Antibody - 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>

Anti-ABI1 Antibody - Images



Anti-ABI1 antibody, ABO10496, Western blottingLane 1: Rat Liver Tissue LysateLane 2: Rat Brain Tissue LysateLane 3: MM231 Cell LysateLane 4: HELA Cell LysateLane 5: SMMC Cell Lysate Lane 6: JURKAT Cell Lysate



Anti-ABI1 antibody, ABO10496, IHC(P)IHC(P): Rat Brain Tissue

Anti-ABI1 Antibody - Background

ABI1 is a human homolog of mouse Abl-interactor-1(Abi1), mapped on 10p11.2. ABI1 participates in the transduction of signals from Ras to Rac by regulating Rac-specific guanine nucleotide exchange factor(GEF) activities. ABI1 dramatically promoted ABL1-mediated tyrosine phosphorylation of MENA, but not of other substrates. Abi-1 regulates c-Abl-mediated phosphorylation of Mena by interacting with both proteins. ABI1 plays a role in the leukemogenesis by translocating to MLL.