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Anti-ABI2 Antibody

Catalog # ABO11374

Product Information

Application	WB
Primary Accession	Q9NYB9
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Abl interactor 2(ABI2) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	55663
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Cytoplasm .
Source	Eukaryota
Protein Name	Abl interactor 2
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 N-terminus of human ABI2(158-173aa RFKVSTQNMKMGGLPR), identical to the related mouse and rat sequences.
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.
Sequence Similarities	Belongs to the ABI family.

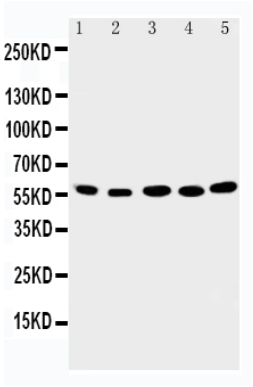
Protein Information

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.

Background

ABI2(ABL Interactor 2), is a protein that in humans is encoded by the ABI2 gene. By analysis of a YAC and a BAC, Machado et al.(2000) mapped the ABI2 gene to 2q31-q33. ABI2 possesses a basic N terminus with homology to a homeodomain protein; a central serine-rich region; 3 PEST sequences, which are implicated in susceptibility to protein degradation; several proline-rich stretches; and an acidic C terminus with multiple phosphorylation sites and an SH3 domain. Dai and Pendergast(1995) suggested that the ABI proteins may function to coordinate the cytoplasmic and nuclear functions of the ABL1 tyrosine kinase.

Images



Anti-ABI2 antibody, ABO11374, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Human Placenta Tissue LysateLane 3: MCF-7 Cell LysateLane 4: HELA Cell LysateLane 5: JURKAT Cell Lysate

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