Product name:	Abi-1 Rabbit Polyclonal Antibody
Cat number:	ABN06448
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Abi-1. AA range:152-201
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,ELISA 1:20000-1:40000
Molecular Weight:	55kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a member of the Abelson-interactor family of adaptor proteins. These proteins facilitate signal transduction as components of several multiprotein complexes, and regulate actin polymerization and cytoskeletal remodeling through interactions with Abelson tyrosine kinases. The encoded protein plays a role in macropinocytosis as a component of the WAVE2 complex, and also forms a complex with EPS8 and SOS1 that mediates signal transduction from Ras to Rac. This gene may play a role in the progression of several malignancies including melanoma, colon cancer and breast cancer, and a t(10;11) chromosomal translocation involving this gene and the MLL gene has been associated with acute myeloid leukemia. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, and a pseudogene of this gene is located on the long arm of chromosome 14. [provided by RefSeqalternative products:Additional isoforms seem to exist,disease:A chromosomal aberration involving ABI1 is a cause of acute leukemias. Translocation t(10;11)(p11.2;q23) with MLL. ABI1 isoform 2 was found to be present in acute leukemia MLL-ABI1 fusion transcript.,domain:The t-SNARE coiled-coil homology domain is necessary and sufficient for interaction with STX1A.,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 MENA. Recruits WASF1 to lamellipodia and there seems to regulate WASF1 protein level.,PTM:In vitro substrate for v-Abl (By similarity). Phosphorylated on tyrosine residues after serum stimulation or induction by v-Abl.,similarity:Belongs to the ABI family.,similarity:Contains 1 SH3 domain.,similarity:Contains 1 t-SNARE coiled-coil homology domain.,subcellular location:Localized to protruding lamellipodia and filopodia tips. Also localized to neuronal growth cones and synaptosomes.,subunit:Interacts with ABL1, MENA, STX1A, SNAP25, VAMP2, EPS8, and through its N-terminus with WASF1. Part of a complex consisting of ABI1, STX1A and SNAP25. Part of a complex consisting of ABI1, EPS8 and SOS1 (By similarity). Interacts with SOS1, SOS2, GRB2, SPTA1 and the first SH3 domain of NCK1. Isoform 6 does not interact with NCK1. Component of the WAVE2 complex composed of ABI1, CYFIP1/SRA1, NCKAP1/NAP1 and WASF2/WAVE2.,tissue specificity:Widely expressed, with highest expression in brain.,