

ABL2 Antibody

Rabbit mAb Catalog # AP91042

Specification

ABL2 Antibody - Product Information

Application Primary Accession Reactivity Clonality Other Names ABL2; ABLL; Tyrosine kinase ARG; kinase Arg;	WB, FC <u>P42684</u> Rat Monoclonal
lsotype Host Calculated MW	Rabbit IgG Rabbit 128343 Da
ABL2 Antibody - Additional Information	
Dilution	WB~~1:1000 FC~~1:10~50
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human ABL2
Description	ABL2 is a cytoplasmic tyrosine kinase which is closely related to but distinct from ABL1. The similarity of the proteins includes the tyrosine kinase domains and extends amino-terminal to include the SH2 and SH3 domains. ABL2 is expressed in both normal and tumor cells. The ABL2 gene product is expressed as two variants bearing different amino termini, both approximately 12-kb in length.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

ABL2 Antibody - Protein Information

Name ABL2

Synonyms ABLL, ARG

Function

Non-receptor tyrosine-protein kinase that plays an ABL1- overlapping role in key processes linked to cell growth and survival such as cytoskeleton remodeling in response to extracellular stimuli,



cell motility and adhesion and receptor endocytosis. Coordinates actin remodeling through tyrosine phosphorylation of proteins controlling cytoskeleton dynamics like MYH10 (involved in movement); CTTN (involved in signaling); or TUBA1 and TUBB (microtubule subunits). Binds directly F-actin and regulates actin cytoskeletal structure through its F-actin- bundling activity. Involved in the regulation of cell adhesion and motility through phosphorylation of key regulators of these processes such as CRK, CRKL, DOK1 or ARHGAP35. Adhesion-dependent phosphorylation of ARHGAP35 promotes its association with RASA1, resulting in recruitment of ARHGAP35 to the cell periphery where it inhibits RHO. Phosphorylates multiple receptor tyrosine kinases like PDGFRB and other substrates which are involved in endocytosis regulation such as RIN1. In brain, may regulate neurotransmission by phosphorylating proteins at the synapse. ABL2 also acts as a regulator of multiple pathological signaling cascades during infection. Pathogens can highjack ABL2 kinase signaling to reorganize the host actin cytoskeleton for multiple purposes, like facilitating intracellular movement and host cell exit. Finally, functions as its own regulator through autocatalytic activity as well as through phosphorylation of its inhibitor, ABI1. Positively regulates chemokine-mediated T-cell migration, polarization, and homing to lymph nodes and immune-challenged tissues, potentially via activation of NEDD9/HEF1 and RAP1 (By similarity).

Cellular Location Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q4JIM5}

Tissue Location Widely expressed.

ABL2 Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- ABL2 Antibody Images

KDa	1	2	3
250			
150	-	-	-
100			
75 —			
50			
37 —			
25			
20 —			
15			
10			



Western blot analysis of ABL2 expression in (1) HeLa cell lysate; (2) NIH/3T3 cell lysate; (3) PC-12 cell lysate.