

ABL2 Antibody

Rabbit mAb Catalog # AP91042

Product Information

Application WB, FC **Primary Accession** P42684

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names ABL2; ABLL; Tyrosine kinase ARG; kinase Arg;

IsotypeRabbit IgGHostRabbitCalculated MW128343

Additional Information

Dilution WB 1:500~1:2000 FC 1:50 **Purification** Affinity-chromatography

Immunogen 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.

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).

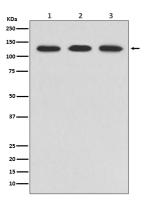
Cellular Location

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

Tissue Location

Widely expressed.

Images



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

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