

## **ABL2 Antibody**

Rabbit mAb **Catalog # AP91042** 

### **Specification**

## **ABL2 Antibody - Product Information**

WB, FC Application **Primary Accession** P42684 Reactivity Rat **Monoclonal** Clonality

**Other Names** 

ABL2; ABLL; Tyrosine kinase ARG; kinase Arg;

Isotype Rabbit IgG Host **Rabbit** Calculated MW 128343 Da

## **ABL2 Antibody - Additional Information**

Purification **Affinity-chromatography** 

**Immunogen** A synthesized peptide derived from human

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 acts also 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:Q4|IM5}

#### **Tissue Location**

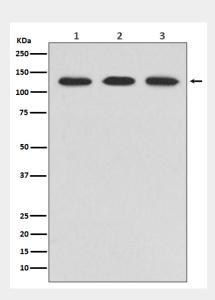
Widely expressed.

## **ABL2 Antibody - Protocols**

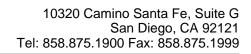
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **ABL2 Antibody - Images**



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





cell lysate.