

ABL2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1098a**Specification**

ABL2 Antibody - Product Information

Application	WB, ICC, E
Primary Accession	P42684
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

Description

ABL2(ARG, Abelson-related gene) 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. c-Abl shows both cytoplasmic and nuclear localization. c-Abl is involved in two different chromosomal translocations present in human leukemias, which generate Bcr-Abl and TEL-Abl.

Immunogen

Purified recombinant fragment of ABL2 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

ABL2 Antibody - Additional Information**Gene ID 27****Other Names**

Abelson tyrosine-protein kinase 2, 2.7.10.2, Abelson murine leukemia viral oncogene homolog 2, Abelson-related gene protein, Tyrosine-protein kinase ARG, ABL2, ABLL, ARG

Dilution

WB~~1/500 - 1/2000

ICC~~N/A

E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ABL2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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 hijack 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, ABL1. 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

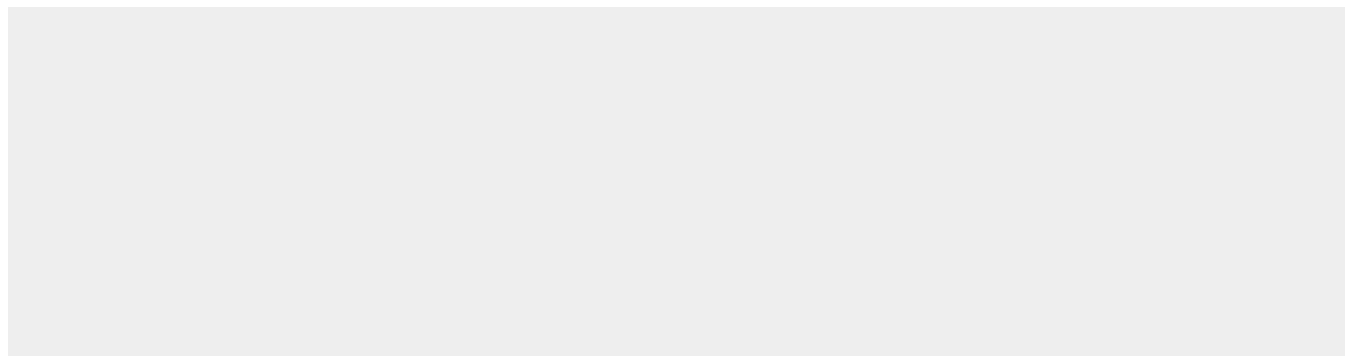
Widely expressed.

ABL2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ABL2 Antibody - Images



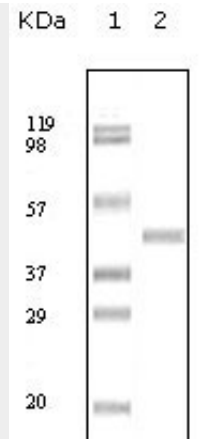


Figure 1: Western blot analysis using ABL2 mouse mAb against truncated ABL2 recombinant protein.



Figure 2: Immunofluorescence staining of methanol-fixed HeLa cells using ABL2 mouse mAb showing cytoplasm localization.

ABL2 Antibody - References

1. Yoshimi I, Takashi I, Tsuneyuki O, et al. Blood. 2000; 95(6): 2126-2131.
2. Scheijen, B. and Griffin, J.D. Oncogene. 2002; 21:3314-33.