

**ABL2 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8460b****Specification**

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**ABL2 Antibody - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P42684</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Mouse</b>
Clonality	<b>monoclonal</b>
Isotype	<b>IgG1,k</b>
Calculated MW	<b>128343</b>

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

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

**Target/Specificity**

This ABL2 antibody is generated from a mouse immunized with a recombinant protein.

**Dilution**

WB~~1:2000

IHC-P~~1:25

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. 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 acts also 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, 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

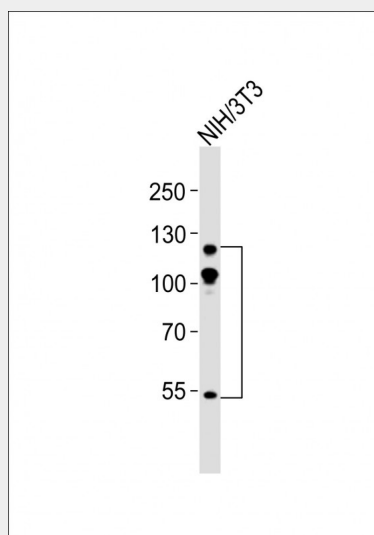
Widely expressed.

### ABL2 Antibody - Protocols

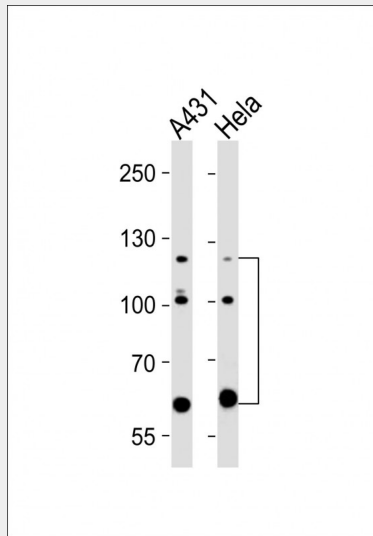
Provided below are standard protocols that you may find useful for product applications.

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

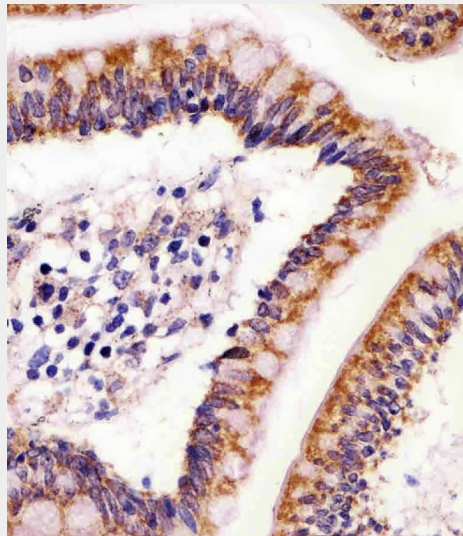
### ABL2 Antibody - Images



Anti-ABL2 Antibody at 1:500 dilution + NIH/3T3 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 128 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



All lanes : Anti-ABL2 Antibody at 1:2000 dilution Lane 1: A431 whole cell lysates Lane 2: HeLa whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 128 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



AM8460b staining ABL2 in human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

### **ABL2 Antibody - Background**

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### **ABL2 Antibody - References**

- Kruh G.D.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:5802-5806(1990).  
Bianchi C.,et al.J. Cell. Biochem. 105:1219-1227(2008).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Bechtel S.,et al.BMC Genomics 8:399-399(2007).  
Gregory S.G.,et al.Nature 441:315-321(2006).