

Anti-ABL2 Picoband Antibody
Catalog # ABO12598**Specification****Anti-ABL2 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	P42684
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Abelson tyrosine-protein kinase 2(ABL2) detection. Tested with WB, IHC-P in Human;Mouse.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ABL2 Picoband 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

Calculated MW

128343 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse

Subcellular Localization

Cytoplasm, cytoskeleton.

Tissue Specificity

Widely expressed.

Protein Name

Abelson tyrosine-protein kinase 2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃N.

Immunogen

E. coli-derived human ABL2 recombinant protein (Position: T1065-R1182). Human ABL2 shares 97.5% amino acid (aa) sequence identity with mouse ABL2.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-ABL2 Picoband 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.

Anti-ABL2 Picoband Antibody - Protocols

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

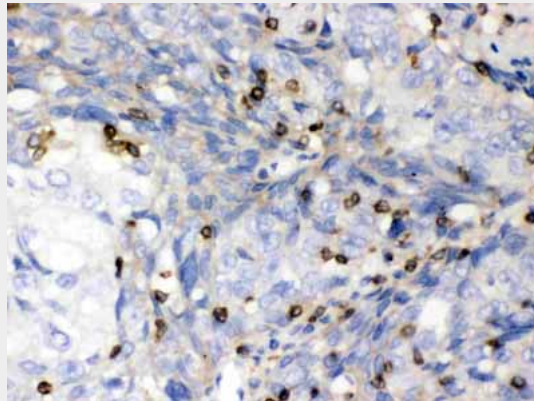
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ABL2 Picoband Antibody - Images



Western blot analysis of ABL2 expression in mouse brain extract (lane 1) and HELA whole cell lysates (lane 2). ABL2 at 140KD was detected using rabbit anti- ABL2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12598) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



ABL2 was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti-ABL2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12598) at 1 µg/mL. The immunohistochemical section was developed using SABC method .

Anti-ABL2 Picoband Antibody - Background

Tyrosine-protein kinase ABL2, also known as Abelson-related gene (Arg), is an enzyme that in humans is encoded by the ABL2 gene. This gene encodes a member of the Abelson family of nonreceptor tyrosine protein kinases. The protein is highly similar to the c-abl oncogene 1 protein, including the tyrosine kinase, SH2 and SH3 domains, and it plays a role in cytoskeletal rearrangements through its C-terminal F-actin- and microtubule-binding sequences. This gene is expressed in both normal and tumor cells, and is involved in translocation with the ets variant 6 gene in leukemia. Multiple alternatively spliced transcript variants encoding different protein isoforms have been found for this gene.