

ARG51820 anti-ABL1/2 phospho (Tyr393 / 439) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ABL1/2 phospho (Tyr393 / 439)
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ABL1/2
Species	Human
Immunogen	Peptide sequence around phosphorylation site of tyrosine 393/439 (D-T-Y(p)-T-A) derived from Human ABL1/2.
Conjugation	Un-conjugated
Alternate Names	Abelson murine leukemia viral oncogene homolog 2; ABL; Abelson-related gene protein; Abelson tyrosine-protein kinase 2; ARG; Tyrosine-protein kinase ARG; EC 2.7.10.2

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg ²⁺ and Ca ²⁺ , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

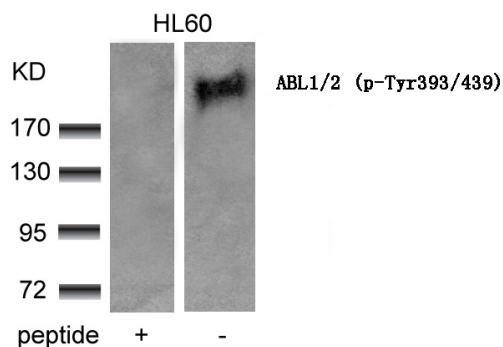
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

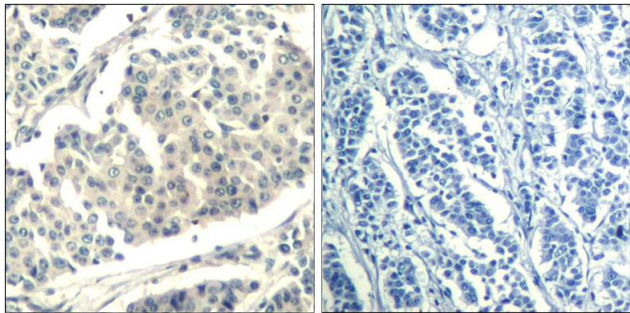
Database links	GeneID: 27 Human Swiss-port # P42684 Human
Gene Symbol	ABL2
Gene Full Name	ABL proto-oncogene 2, non-receptor tyrosine kinase
Background	Regulates cytoskeleton remodeling during cell differentiation, cell division and cell adhesion. Localizes to dynamic actin structures, and phosphorylates CRK and CRKL, DOK1, and other proteins controlling cytoskeleton dynamics. Regulates DNA repair potentially by activating the proapoptotic pathway when the DNA damage is too severe to be repaired. Phosphorylates PSMA7 that leads to an inhibition of proteasomal activity and cell cycle transition blocks.
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, ABL1. [UniProt]
Research Area	Cancer antibody; Gene Regulation antibody; Signaling Transduction antibody
Calculated Mw	128 kDa
PTM	Phosphorylated at Tyr-261 by ABL1 in response to oxidative stress. Phosphorylated by PDGFRB (By similarity). Polyubiquitinated. Polyubiquitination of ABL2 leads to degradation.

Images



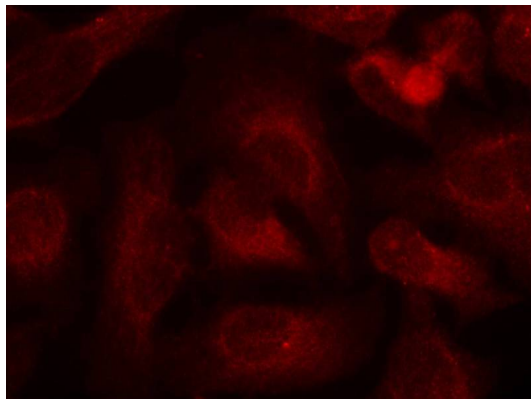
ARG51820 anti-ABL1/2 phospho (Tyr393 / 439) antibody WB image

Western blot: Extracts from HL60 cells stained with ARG51820 anti-ABL1/2 phospho (Tyr393 / 439) antibody and the same antibody preincubated with blocking peptide.



ARG51820 anti-ABL1/2 phospho (Tyr393 / 439) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51820 anti-ABL1/2 phospho (Tyr393 / 439) antibody (left) or the same antibody preincubated with blocking peptide (right).



ARG51820 anti-ABL1/2 phospho (Tyr393 / 439) antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with ARG51820 anti-ABL1/2 phospho (Tyr393 / 439) antibody.