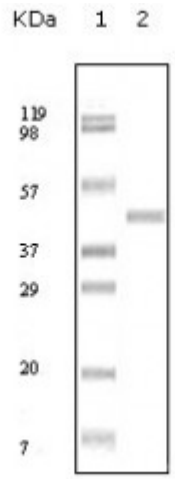
Anti-Arg antibody



Description	Mouse monoclonal to Arg.

Model	STJ97847
Host	Mouse
Reactivity	Human
Applications	ELISA, IF, WB
Immunogen	Purified recombinant fragment of Arg expressed in E. Coli.
Gene ID	27
Gene Symbol	ABL2
Dilution range	WB 1:500-1:2000IF 1:200-1:1000ELISA 1:10000
Specificity	Arg Monoclonal Antibody detects endogenous levels of Arg protein.
Tissue Specificity	Widely expressed.
Purification	Affinity purification
Clone ID	1H1B11
Note	For Research Use Only (RUO).
Protein Name	Abelson tyrosine-protein kinase 2 Abelson murine leukemia viral oncogene homolog 2 Abelson-related gene protein Tyrosine-protein kinase ARG
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1

Formulation	Ascitic fluid containing 0.03% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:77OMIM:164690
Alternative Names	Abelson tyrosine-protein kinase 2 Abelson murine leukemia viral oncogene homolog 2 Abelson-related gene protein Tyrosine-protein kinase 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.
Sequence and Domain Family	Contains two distinct classes of F-actin-binding domains. Although both can bind F-actin, the 2 are required to bundle actin filaments .
Cellular Localization	Cytoplasm, cytoskeleton.
Post-translational Modifications	Phosphorylated at Tyr-261 by ABL1 in response to oxidative stress. Phosphorylated by PDGFRB . Polyubiquitinated. Polyubiquitination of ABL2 leads to degradation.