

ARG20529 anti-DOK1 / p62 Dok phospho (Tyr362) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes DOK1 / p62 Dok phospho (Tyr362)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ELISA, WB
Specificity	This antibody was cross-adsorbed to a phosphotyrosine peptide before affinity purification using phospho-Dok1 (Tyr-362) peptide. The purified antibody detects a band at ~62 kDa corresponding to Dok1 in western blots of human Jurkat cells, but does not detect this band after alkaline phosphatase treatment. Similar to Dok1 (Ser-450) antibody, this antibody also detects an 80 kDa band that has not been identified.
Host	Rabbit
Clonality	Polyclonal
Target Name	DOK1 / p62 Dok
Species	Human
Immunogen	KLH-conjugated phosphospecific peptide around Tyr362 in human Dok1 protein. This sequence is conserved in Dok1 from rat and mouse (Tyr361), and has high homology to Dok2 (Tyr337). The site is not conserved in other Dok family members.
Conjugation	Un-conjugated
Alternate Names	dok; p62; P62DOK; Docking protein 1; pp62; Downstream of tyrosine kinase 1

Application Instructions

Application table	Application	Dilution
	ELISA	1:2000
	WB	1:1000
Application Note	WB: Antibody is suggested to be diluted in 5% skimmed milk/Tris buffer with 0.04% Tween20 and incubated for 1 hour at room temperature. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 50% Glycerol, 1 mg/ml BSA, and 0.05% Sodium azide
Preservative	0.05% Sodium azide
Stabilizer	50% Glycerol, 1 mg/ml BSA
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

Gene Symbol	DOK1
Gene Full Name	docking protein 1, 62kDa (downstream of tyrosine kinase 1)
Background	Doks are a family of adaptor proteins that include six Dok proteins (Dok1 to Dok6), which have an N-terminal pleckstrin homology domain, a central phosphotyrosine binding domain, and a C-terminal region containing multiple tyrosine residues. When phosphorylated, these tyrosines can serve as docking sites for SH2 domain-containing proteins. Dok1 (p62dok) has been shown to bind Ras-GAP, Nck, and Csk. Several tyrosine phosphorylation sites have been identified for Dok1. One site, Tyr-362 (Tyr-361 mouse), is phosphorylated by c-Abl, is required for Nck binding, and may be critical for filopodia formation during fibroblast spreading on fibronectin. Alternatively, Dok1 activity is also regulated by serine phosphorylation. IκB Kinase β phosphorylates several serine sites including Ser-450 in vitro, and TNFα, IL-1, and radiation treatment lead to phosphorylation of Ser-443, Ser-446, and Ser-450 in vivo. Phosphorylation of these serine sites may be required for Dok-mediated inhibition of MAPK signaling and stimulation of cell motility.
Function	DOK proteins are enzymatically inert adaptor or scaffolding proteins. They provide a docking platform for the assembly of multimolecular signaling complexes. DOK1 appears to be a negative regulator of the insulin signaling pathway. Modulates integrin activation by competing with talin for the same binding site on ITGB3. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	52 kDa
PTM	Constitutively tyrosine-phosphorylated. Phosphorylated by TEC (By similarity). Phosphorylated by LYN (By similarity). Phosphorylated on tyrosine residues by the insulin receptor kinase. Results in the negative regulation of the insulin signaling pathway. Phosphorylated on tyrosine residues by SRMS.

Images



ARG20529 anti-DOK1 / p62 Dok phospho (Tyr362) antibody WB image

Western blot: 1) and 2) calyculin A (100 nM) treated Jurkat cells for 30 min, 2) then the blots were treated with alkaline phosphatase. The blots were stained with ARG20529 anti-DOK1 / p62 Dok phospho (Tyr362) antibody.