10320 Camino Santa Fe, Suite G
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Anti-Dok1 (Tyr-362) [Dok2 (Tyr-337)], Phosphospecific Antibody

Catalog # AN1748

Specification

Anti-Dok1 (Tyr-362) [Dok2 (Tyr-337)], Phosphospecific Antibody - Product Information

Primary Accession	Q99704
Reactivity	**Bovine**
Host	**Rabbit**
Clonality	**Rabbit Polyclonal**
Isotype	**IgG**
Calculated MW	**52392**

Anti-Dok1 (Tyr-362) [Dok2 (Tyr-337)], Phosphospecific Antibody - Additional Information

Gene ID	**1796**

Other Names
p62DOK

Target/Specificity
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.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Dok1 (Tyr-362) [Dok2 (Tyr-337)], Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-Dok1 (Tyr-362) [Dok2 (Tyr-337)], Phosphospecific Antibody - Protocols

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

- Western Blot
- Blocking Peptides

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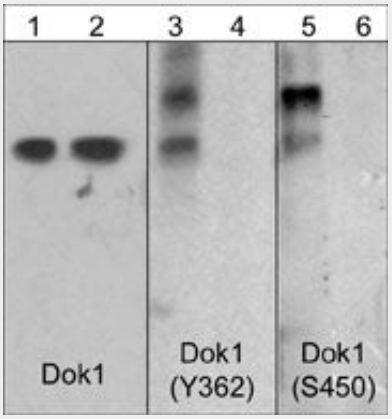
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Dok1 (Tyr-362) [Dok2 (Tyr-337)], Phosphospecific Antibody - Images



Western blot image of Jurkat cells stimulated with calyculin A (100 nM, 30 min) (lanes 1-6) followed by lambda phosphatase (lanes 2 & 6) or alkaline phosphatase (lane 4) treatment. The blots were probed with anti-Dok1 (lanes 1 & 2), anti-Dok1 (Tyr-362) (lanes 3 & 4), and anti-Dok1 (Ser-450) (lanes 5 & 6).

Anti-Dok1 (Tyr-362) [Dok2 (Tyr-337)], Phosphospecific Antibody - 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.