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#3911

## Phospho-p56Dok-2 (Tyr351) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Transfected Only	<b>MW (kDa):</b> 56 to 58	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #O60496	<b>Entrez-Gene Id:</b> 9046
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

Phospho-p56Dok-2 (Tyr351) Antibody detects transfected levels of p56Dok-2 only when phosphorylated at tyrosine 351. The antibody does not cross-react with other tyrosine phosphorylated p62Dok family members.

### Species predicted to react based on 100% sequence homology

Mouse

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr351 of mouse p56Dok-2. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Docking proteins are substrates of tyrosine kinases that function in the recruitment and assembly of specific signal transduction molecules. There are five members in the p62dok family, p62Dok (Dok-1), p56Dok-2 (Dok-2, or DoK-R), Dok-3, Dok-4 and Dok-5 (1-3), characterized by the presence of an amino-terminal PH domain, a central PTB domain and numerous potential sites of tyrosine phosphorylation. Tyrosine phosphorylation of p56Dok-2 occurs upon stimulation of cells with a variety of stimuli, or in cells transformed by oncogenic tyrosine kinases such as v-Src and Bcr-Abl (3-5). Based on the presence of several signaling domains (PH, PTB domain, tyrosine residue and proline-rich regions), it has been proposed that the p62dok family act as docking proteins that link RTKs to signal transduction pathways. p56Dok-2 has been proposed to be a negative regulator of cytokine-induced proliferation in T cells (5). Phosphorylated Tyr351 of p56Dok-2 mediates an association with the SH2 domain of Nck (4).

### Background References

1. Master, Z. et al. (2001) *EMBO J.* 20, 5919-5928.
2. Grimm, J. et al. (2001) *J. Cell. Biol.* 154, 345-354.
3. Cristofano, A. D. et al. (1998) *J. Biol. Chem.* 273, 4827-4830.
4. Jones, N. and Dumont, D.J. (1999) *Curr. Biol.* 9, 1057-1060.
5. Nemorin, J.G. and Duplay, P. (2000) *J. Biol. Chem.* 275, 14590-14597.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human

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