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#5674

## MKK3 Antibody

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	40	Rabbit	#P46734	5606

### 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

MKK3 Antibody recognizes endogenous levels of total MKK3 protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human MKK3 protein. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

MKK3 and MKK6 are two closely related dual-specificity protein kinases that activate p38 MAP kinase (1-5). MKK3 and MKK6 both phosphorylate and activate p38 MAP kinase at its activation site, Thr-Gly-Tyr, but do not phosphorylate or activate Erk1/2 or SAPK/JNK. Phosphorylation of p38 MAP kinase dramatically stimulates its ability to phosphorylate protein substrates such as ATF-2 and Elk-1. MKK3 and MKK6 are both activated by different forms of cellular stress and inflammatory cytokines (4,5). Activation of MKK3 and MKK6 occurs through phosphorylation at Ser189 and Thr222 on MKK3 (2) and Ser207 and Thr211 on MKK6 (4,5).

### Background References

- Derijard, B. et al. (1995) *Science* 267, 682-685.
- Raingeaud, J. et al. (1995) *J. Biol. Chem.* 270, 7420-7426.
- Sluss, H.K. et al. (1994) *Mol. Cell. Biol.* 14, 8376-8384.
- Raingeaud, J. et al. (1996) *Mol. Cell. Biol.* 16(3), 1247-1255.
- Han, J. et al. (1996) *J. Biol. Chem.* 271, 2886-2891.

### 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 **M:** Mouse **R:** Rat **Mk:** Monkey

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