

**Phospho-MKK3 (Ser189)/MKK6 (Ser207)
(D8E9) Rabbit mAb****Orders:** 877-616-CELL (2355)
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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IF-IC	H M R Mk	Endogenous	38 MKK6, 40 MKK3	Rabbit IgG	#P46734, #P52564	5606, 5608

Product Usage Information**Application**Western Blotting
Immunoprecipitation
Immunofluorescence (Immunocytochemistry)**Dilution**1:1000
1:100
1:400**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Phospho-MKK3 (Ser189)/MKK6 (Ser207) (D8E9) Rabbit mAb recognizes endogenous levels of MKK3 and MKK6 proteins only when phosphorylated at Ser189 (MKK3) or Ser207 (MKK6).

Species predicted to react based on 100% sequence homology

Zebrafish, Bovine, Guinea Pig

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser189 of human MKK3 protein and Ser207 of human MKK6 protein.

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

1. Derijard, B. et al. (1995) *Science* 267, 682-685.
2. Raingeaud, J. et al. (1995) *J. Biol. Chem.* 270, 7420-7426.
3. Sluss, H.K. et al. (1994) *Mol. Cell. Biol.* 14, 8376-8384.
4. Raingeaud, J. et al. (1996) *Mol. Cell. Biol.* 16(3), 1247-1255.
5. 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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.**Applications Key****W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)**Cross-Reactivity Key****H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey**Trademarks and Patents**

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