

#9233 Store at -20°C

MKK3/MKK6 Control Cell Extracts



✓ Controls for 10 Western mini-blots

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 10/26/17

For Research Use Only. Not For Use In Diagnostic Procedures.

Product Includes	Product #	Quantity
MKK3/MKK6 Control Cell Extracts (3T3 untreated)	95928	200 ul
MKK3/MKK6 Control Cell Extracts (3T3 +UV)	40196	200 ul

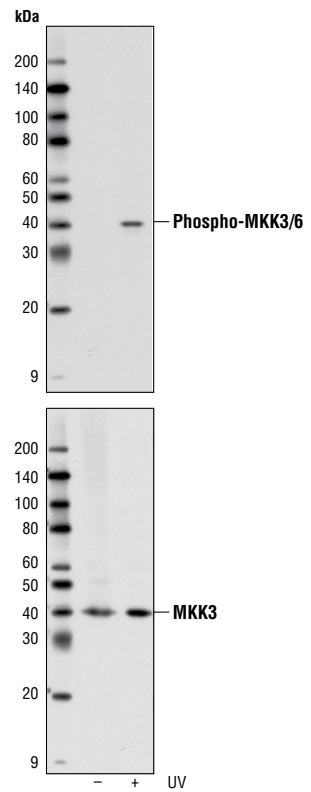
Background: MKK3 and MKK6 are two closely related dual-specificity protein kinases that activate p38 MAP kinase (1-5). MKK3 and MKK6 both phosphorylate and activate p38 MAP kinase at its activation site, Thr-Gly-Tyr, but do not phosphorylate or activate Erk1/2 or SAPK/JNK. Phosphorylation of p38 MAP 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 Thr193 on MKK3 (2) and Ser207 and Thr211 on MKK6 (4,5).

Description: *Nonphosphorylated MKK3/MKK6 Control Cell Extracts:* Total cell extracts from NIH/3T3 cells, serve as a negative control. Supplied in SDS Sample Buffer.

Phosphorylated MKK3/MKK6 Control Cell Extracts: Total cell extracts from NIH/3T3 cells, treated with 50 mJ UV light and a 30 minute recovery, serve as a positive control. Supplied in SDS Sample Buffer.

Directions for Use: Boil for 3 minutes prior to use. Load 20 µl of phosphorylated and nonphosphorylated MKK3/MKK6 Control Cell Extracts per lane.

- 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.



Western blot analysis of MKK3/6 Control Cell extracts using Phospho-MKK3 (Ser189)/MKK6 (Ser207) (22A8) Rabbit mAb #9236 (upper) and MKK3 Antibody #5674 (lower).

Storage: Supplied in SDS Sample Buffer: 62.5 mM Tris-HCl (pH 6.8 at 25°C), 2% w/v SDS, 10% glycerol, 50 mM DTT, 0.01% w/v phenol red or bromophenol blue. Store at -20°C or at -80°C for long term storage.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

© 2012 Cell Signaling Technology, Inc. Cell Signaling Technology® is a trademark of Cell Signaling Technology, Inc.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.