

MAP3K6 (H-184): sc-68383

BACKGROUND

Mitogen-activated protein (MAP) kinase cascades are activated by various extracellular stimuli including growth factors. The MEK kinases (also designated MAP kinase kinase kinases, MKKKs, MAP3Ks or MEKKs) phosphorylate and thereby activate the MEKs (also called MAP kinase kinases or MKKs), including ERK, JNK and p38. These activated MEKs in turn phosphorylate and activate the MAP kinases. The MEK kinases include Raf-1, Raf-B, Mos, MEK kinase-1, MEK kinase-2, MEK kinase-3, MEK kinase-4, ASK 1 (MEK kinase-5) and MAP3K6 (MEK kinase-6). MAP3K6, also called ASK 2, activates the JNK kinase pathway but not the ERK or p38 kinase pathways. It is activated by phosphorylation on Thr 806 and is only stable and catalytically active when coupled with ASK 1. Three isoforms exist for MAP3K6 due to alternative splicing. Isoform 1 represents the full length protein. Isoform 2 lacks the amino acid sequences 1-277 and 1075-1288 and contains a unique sequence between amino acid residues 1065-1074. Isoform 3 lacks the amino acid sequence 161-168.

REFERENCES

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2. Maki, H. 2003. Genomic organization and promoter analysis of mouse apoptosis signal-regulating kinase 2 (ASK 2). *Kokubyo Gakkai Zasshi* 70: 9-18.
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CHROMOSOMAL LOCATION

Genetic locus: MAP3K6 (human) mapping to 1p36.11; Map3k6 (mouse) mapping to 4 D2.3.

SOURCE

MAP3K6 (H-184) is a rabbit polyclonal antibody raised against amino acids 123-306 mapping near the N-terminus of MAP3K6 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

MAP3K6 (H-184) is recommended for detection of MAP3K6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MAP3K6 (H-184) is also recommended for detection of MAP3K6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MAP3K6 siRNA (h): sc-62598, MAP3K6 siRNA (m): sc-62599, MAP3K6 shRNA Plasmid (h): sc-62598-SH, MAP3K6 shRNA Plasmid (m): sc-62599-SH, MAP3K6 shRNA (h) Lentiviral Particles: sc-62598-V and MAP3K6 shRNA (m) Lentiviral Particles: sc-62599-V.

Molecular Weight of MAP3K6 isoforms 1/3: 143 kDa.

Molecular Weight of MAP3K6 isoform 2: 88 kDa.

Positive Controls: A549 cell lysate: sc-2413, SW480 cell lysate: sc-2219 or PC-12 cell lysate: sc-2250.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.