MEK kinase-1 (1-9C-2A): sc-449

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 MEKs) phosphorylate and thereby activate the MEks (also called MAP kinase kinases or M KKs), 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). MEK kinase-1 activates the ERK and c-Jun NH2-terminal kinase (JNK) pathways by phosphorylation of MAP2K1 and MAP2K4, and also activates the central protein kinases of the NFκB pathway, CHUK and IKKB. Additionally, MEK kinase-1 uses an E3 ligase through its PHD domain, a RING-finger-like structure, to target proteins for degradation through ubiquitination.

CHROMOSOMAL LOCATION
Genetic locus: MAP3K1 (human) mapping to 5q11.2; Map3k1 (mouse) mapping to 55K-34K-90K-55K-43K-34K.

SOURCE
MEK kinase-1 (1-9C-2A) is a mouse monoclonal antibody raised against amino acids 1-301 mapping near the N-terminus of MEK kinase-1 of human origin.

PRODUCT
Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

MEK kinase-1 (1-9C-2A) is available conjugated to agarose (sc-449 AC), sodium azide and 0.1% gelatin.

APPLICATIONS
MEK kinase-1 (1-9C-2A) is recommended for detection of MEK kinase-1 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for MEK kinase-1 siRNA (h): sc-35898, MEK kinase-1 siRNA (m): sc-35899, MEK kinase-1 shRNA Plasmid (h): sc-35898-SH, MEK kinase-1 shRNA Plasmid (m): sc-35899-SH, MEK kinase-1 shRNA (h) Lentiviral Particles: sc-35898-V and MEK kinase-1 shRNA (m) Lentiviral Particles: sc-35899-V.

Molecular Weight of full length MEK kinase-1: 195 kDa.

Molecular Weight of cleaved MEK kinase-1: 80 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, c4 whole cell lysate: sc-364186 or NRK whole cell lysate: sc-364197.

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

DATA

SELECT PRODUCT CITATIONS

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

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