

MOK (A-14): sc-103622

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. MOK (MAPK/MAK/MRK overlapping kinase), also known as RAGE (renal tumor antigen), is a 419 amino acid protein that localizes to the cytoplasm and contains one protein kinase domain. Existing as a member of the Ser/Thr protein kinase family, MOK is expressed in pancreas, lung, brain and kidney where it catalyzes the ATP-dependent phosphorylation of a variety of exogenous substrates. MOK exists as multiple alternatively spliced isoforms and is subject to autophosphorylation, an event which may increase its enzymatic activity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RAGE (human) mapping to 14q32.31; Rage (mouse) mapping to 12 F1.

SOURCE

MOK (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MOK of mouse origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-103622 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MOK (A-14) is recommended for detection of MOK 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); may cross-react with MOK-1 and MOK-2 but not MOK-3 or MOK-4.

MOK (A-14) is also recommended for detection of MOK in additional species, including equine, canine and porcine.

Suitable for use as control antibody for MOK siRNA (h): sc-75810, MOK siRNA (m): sc-75811, MOK shRNA Plasmid (h): sc-75810-SH, MOK shRNA Plasmid (m): sc-75811-SH, MOK shRNA (h) Lentiviral Particles: sc-75810-V and MOK shRNA (m) Lentiviral Particles: sc-75811-V.

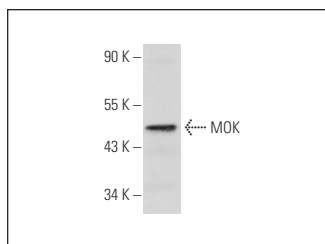
Molecular Weight of MOK: 48 kDa.

Positive Controls: A549 cell lysate: sc-2413.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MOK (A-14): sc-103622. Western blot analysis of MOK expression in A549 whole cell lysate.

STORAGE

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