SANTA CRUZ BIOTECHNOLOGY, INC.

MOK (K-18): sc-103625

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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STORAGE

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

RESEARCH USE

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

CHROMOSOMAL LOCATION

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

SOURCE

MOK (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MOK 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.

Blocking peptide available for competition studies, sc-103625 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MOK (K-18) is recommended for detection of MOK of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-4 but not MOK-2 or MOK-3.

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.

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) 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.

PROTOCOLS

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