

Mnk2 (S-20): sc-6964

BACKGROUND

The MAPKAP (for MAP kinase activated protein) kinases are a group of MAP kinase substrates which are themselves kinases. In response to activation, the MAP kinases phosphorylate downstream components on a consensus Pro-X-Ser/Thr-Pro motif. Several kinases that contain this motif have been identified and serve as substrates for the ERK and p38 MAP kinases, including the serine/threonine kinases Rsk-1 (also designated MAPKAP kinase-1), Rsk-2 and Rsk-3, which are phosphorylated by ERK1 and ERK2. Similarly, p38 phosphorylates and activates the serine/threonine kinases MAPKAP kinase-2 and MAPKAP kinase-3 (also designated 3pK). The serine/threonine kinases Mnk1 and Mnk2 are substrates for both ERK and p38 MAP kinases. Mnk2 exists as multiple isoforms, including Mnk2a and Mnk2b, due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: MKNK2 (human) mapping to 19p13.3; Mknk2 (mouse) mapping to 10 C1.

SOURCE

Mnk2 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Mnk2 of mouse 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-6964 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Mnk2 (S-20) is recommended for detection of Mnk2 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).

Suitable for use as control antibody for Mnk2 siRNA (h): sc-35951, Mnk2 siRNA (m): sc-35952, Mnk2 shRNA Plasmid (h): sc-35951-SH, Mnk2 shRNA Plasmid (m): sc-35952-SH, Mnk2 shRNA (h) Lentiviral Particles: sc-35951-V and Mnk2 shRNA (m) Lentiviral Particles: sc-35952-V.

Molecular Weight of Mnk2a: 52 kDa.

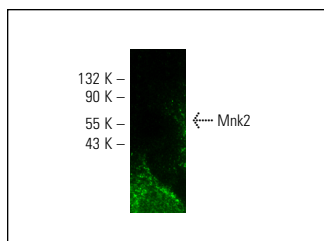
Molecular Weight of Mnk2b: 47 kDa.

Positive Controls: rat lung extract: sc-2396, HeLa whole cell lysate: sc-2200 or Ramos cell lysate: sc-2216.

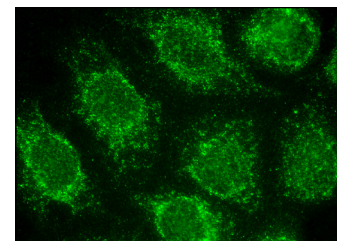
RECOMMENDED SECONDARY REAGENTS

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



Mnk2 (S-20): sc-6964. Western blot analysis of Mnk2 expression in rat lung extract.



Mnk2 (S-20): sc-6964. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization.

SELECT PRODUCT CITATIONS

- Chrestensen, C.A., et al. 2007. Loss of MNK function sensitizes fibroblasts to serum-withdrawal induced apoptosis. *Genes Cells* 12: 1133-1140.
- Chrestensen, C.A., et al. 2007. MNK1 and MNK2 regulation in HER2-over-expressing breast cancer lines. *J. Biol. Chem.* 282: 4243-4252.
- Ueda, T., et al. 2010. Combined deficiency for MAP kinase-interacting kinase 1 and 2 (Mnk1 and Mnk2) delays tumor development. *Proc. Natl. Acad. Sci. USA* 107: 13984-13990.

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.


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Try **Mnk2 (B-6): sc-271559**, our highly recommended monoclonal alternative to Mnk2 (S-20).