

MSK1 (D-77): sc-130431

BACKGROUND

The family of ribosomal S6 kinases (Rsk), designated Rsk-1, Rsk-2 and Rsk-3, have been implicated as important signaling intermediates in response to a broad range of ligand-activated receptor tyrosine kinases. A unique feature common to the three members of the Rsk family is that each possesses two non-identical complete kinase catalytic domains. A related S6 kinase, p70 S6 kinase, functions to phosphorylate the S6 protein on ribosomal 40S subunits. p70 S6 kinase β shares high sequence homology with p70 S6 kinase, except in the carboxy terminus where it contains a proline-rich domain that may be involved in SH3 domain containing protein interactions. MSK1 (also designated RLPK) is related to Rsk and p70 S6 kinase family members and is thought to be structurally similar to Rsk family members, but it may be regulated by distinct mechanisms.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RPS6KA5 (human) mapping to 14q32.11.

SOURCE

MSK1 (D-77) is a mouse monoclonal antibody raised against a partial recombinant protein mapping within amino acids 271-370 of MSK1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} lambda in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MSK1 (D-77) is recommended for detection of MSK1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for MSK1 siRNA (h): sc-35977, MSK1 shRNA Plasmid (h): sc-35977-SH and MSK1 shRNA (h) Lentiviral Particles: sc-35977-V.

Molecular Weight of MSK1: 90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HeLa+UV irradiated cell lysate: sc-2221 or JAR cell lysate: sc-2276.

SELECT PRODUCT CITATIONS

- Sundar, I.K., et al. 2012. Mitogen- and stress-activated kinase 1 (MSK1) regulates cigarette smoke-induced histone modifications on NF κ B-dependent genes. *PLoS ONE* 7: e31378.

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.

PROTOCOLS

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