**BACKGROUND**

The family of ribosomal S6 kinases (Rsk), designated Rsk-1 (or MAPKAP kinase-1), Rsk-2 and Rsk-3, are intracellular serine/threonine kinases that are important signaling intermediates in response to a broad range of ligand-activated receptor tyrosine kinases. A unique feature common to the members of the Rsk family is that each possesses two non-identical complete kinase catalytic domains. An additional Rsk protein, Rsk-4, shows a high level of homology to the three previously isolated members of the human Rsk family. Rsk-4 is most abundantly expressed in brain and kidney and plays a role in normal neuronal development. The family of ribosomal S6 kinases includes p70 S6 kinase and p70 S6 kinase β, which are thought to have similar regulatory functions. MSK1 (also designated RLPK) is a novel Rsk-related protein, which, like the p90 Rsk family members, contains two non-identical complete kinase catalytic domains.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: RPS6KA3 (human) mapping to Xp22.12; Rps6ka3 (mouse) mapping to X F4.

**SOURCE**

Rsk-2 (E-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 718-740 at the C-terminus of Rsk-2 of human origin.

**PRODUCT**

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

Rsk-2 (E-1) is available conjugated to agarose (sc-9986 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-9986 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either peroxidase (sc-9986 FE), fluorescein (sc-9986 FITC), Alexa Fluor® 488 (sc-9986 AF488), Alexa Fluor® 546 (sc-9986 AF546), Alexa Fluor® 594 (sc-9986 AF594) or Alexa Fluor® 647 (sc-9986 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-9986 AF680) or Alexa Fluor® 790 (sc-9986 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-9986 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**STORAGE**

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

**APPLICATIONS**

Rsk-2 (E-1) is recommended for detection of Rsk-2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Rsk-2 (E-1) is also recommended for detection of Rsk-2 in additional species, including equine, bovine, porcine and avian.


Molecular Weight of Rsk-2: 80 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or A-431 whole cell lysate: sc-2201.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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