

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse RSK1 when phosphorylated at S221, and human and mouse RSK2 when phosphorylated at S227.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1019B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Phosphopeptide containing the human RSK1 S221 site
Formulation	Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1:1000 dilution	See Below
Simple Western	1:100 dilution	See Below

DATA

Western Blot

Detection of Human Phospho-RSK1 (S221)/RSK2 (S227) by Western Blot.
Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line untreated (-) or treated (+) with 200 nM PMA for 20 minutes. PVDF membrane was probed with 1:1000 dilution of Rabbit Anti-Human/Mouse Phospho-RSK1/RSK2 (RSK1 S221, RSK2 S227) Monoclonal Antibody (Catalog # MAB892) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Phospho-RSK1 (S221)/RSK2 (S227) at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western

Detection of Human Phospho-RSK1 (S221)/RSK2 (S227) by Simple Western™. Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line untreated (-) or treated (+) with 200 nM PMA for 20 minutes, loaded at 0.1 mg/mL. A specific band was detected for Phospho-RSK1 (S221)/RSK2 (S227) at approximately 91 kDa (as indicated) using 1:100 dilution of Rabbit Anti-Human/Mouse Phospho-RSK1/RSK2 (RSK1 S221, RSK2 S227) Monoclonal Antibody (Catalog # MAB892). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<ul style="list-style-type: none"> ● 12 months from date of receipt, -20 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after opening. ● 6 months, -20 °C under sterile conditions after opening.

BACKGROUND

RSK1 (Ribosomal S6 Kinase 1), gene name RPS6KA1 (Ribosomal Protein S6 Kinase α1), also known as p90RSK1 (90 kDa RSK1) or MAPKAPK 1a (MAPK Activated Protein Kinase 1a), is a widely expressed member of the RSK family of growth factor-regulated serine/threonine kinases. RSK proteins contain two non-identical kinase catalytic domains, and mediate activation of Mitogen-Activated Kinase (MAPK) cascades and stimulation of cell proliferation and differentiation. Interaction with Erk1 and Erk2 initiates an ordered phosphorylation sequence which regulates RSK activation. Phosphorylation of Ser 380 recruits PDK1 which, in turn, phosphorylates RSK1 in the activation loop at Ser 221 (or Ser227 in RSK2).

PRODUCT SPECIFIC NOTICES

* Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.