

# Monoclonal Antibody to RSK1

Cat. #:607079

## Description

Rsk1 is a member of a family of 90kDa ribosomal protein S6 kinases, which includes Rsk1, Rsk2 and Rsk3. These are broadly expressed serine / threonine protein kinases activated in response to mitogenic stimuli, including extracellular signal regulated protein kinases Erk1 and Erk2. Rsk1 is activated by MAPK in vitro and in vivo via phosphorylation. Active Rsks appear to play a major role in transcriptional regulation by translocating to the nucleus and phosphorylating c-Fos and CREB. RSK proteins possess two separate kinase domains, the C terminal kinase domain and the N terminal kinase domain, separated by a linker region containing a hydrophobic motif. RSK is activated by many stimuli including growth factors, phorbol esters, cAMP, heat shock, and irradiation.

## Immunogen

Ni-NTA purified truncated recombinant RSK1 expressed in E. Coli strain BL21 (DE3)

## Applications

Western Blot: 1: 500- 1: 2,000

IHC(P): 1: 500- 1: 2,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

## Formulation

Crude ascites.

## References

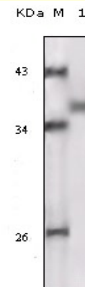
1. Alcorta, D.A., et al. 1989. Mol. Cell. Biol. 9:3850-3859.
2. Sweet, L.J., et al. 1990. Mol. Cell. Biol. 10: 2413-2417.

**Clone Number:** 10B1D7A9,10B1D7E12

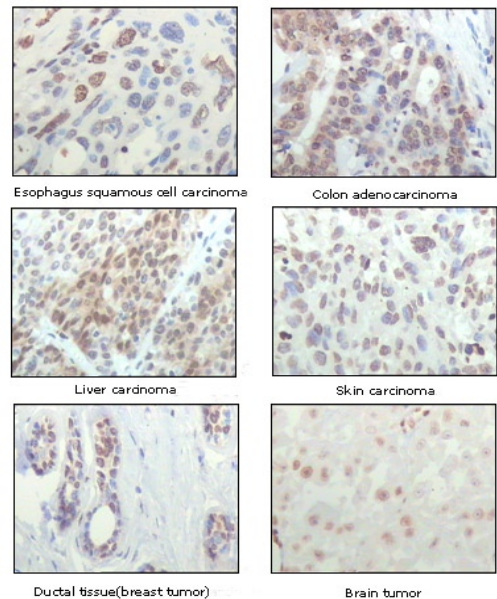
**Isotype:** IgG2a

**Species:** Human

**Storage and Stability:** Stable for one year at  $-20^{\circ}\text{C}$  from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing. Aliquot will be stable at  $4^{\circ}\text{C}$  for 3 months.



**Figure 1:** Western blot analysis using RSK1 monoclonal antibody against truncated RSK1 recombinant protein



**Figure 2:** Immunohistochemical analysis of paraffin-embedded Human Esophagus squamous cell carcinoma, Brain tumor, Colon adenocarcinoma, Breast cancer, Skin carcinoma and Liver carcinoma, showing nuclear location using RSK1 antibody with DAB staining