

**Phospho-Rsk1 (pT359/pS363) Rabbit Monoclonal Antibody  
Product Data Sheet**

**Catalog #2006-1**

Clone ID: E238      Lot #: *Please refer to vial*  
Quantity: 100 µl  
Type: Rabbit Monoclonal IgG  
Species Cross-reactivity:  Human  Mouse  Rat  
Applications:  WB  IHC  ICC  Flow Cytometry  IP  
Molecular Wt.: 90 kDa  
UniProt ID: Q15418

**Background:** Rsk-1 (p90-Rsk-1) is a member of a family of 90 kDa ribosomal protein S6 kinases, which includes Rsk-1, Rsk-2 and Rsk-3. These are broadly expressed serine/threonine protein kinases (1) activated in response to mitogenic stimuli, including extracellular signal-regulated protein kinases Erk1 and Erk2 (2). p90-Rsk-1 is activated by MAPK in vitro and in vivo via phosphorylation (3). Active Rsk1 appear to play a major role in transcriptional regulation by translocating to the nucleus and phosphorylating c-Fos and CREB (2,4).

**Specificity:** A synthetic phospho-peptide corresponding to residues surrounding Thr359 and Ser363 of human RSK1 was used as immunogen. The antibody only detects RSK1 phosphorylated on Threonine 359 and Serine 363.

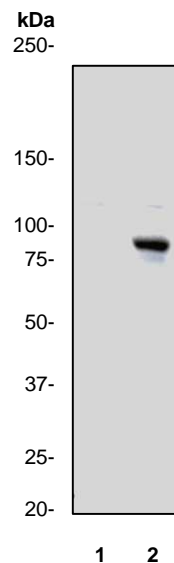
**Storage Conditions:** Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

**Recommended Dilutions:**

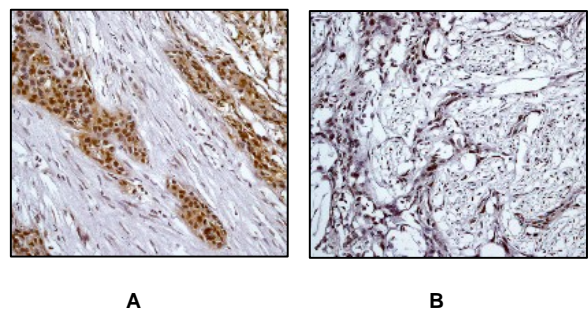
WB: 1:20,000  
IHC: 1:100  
ICC: 1:50  
IP: 1:40

**Background References:**

1. Dalby, K.N. et al. Identification of Regulatory Phosphorylation Sites in Mitogen-activated Protein Kinase (MAPK)-activated Protein Kinase-1a/p90rsk That Are Inducible by MAPK. *J. Biol. Chem.* 273, 1496–1505 (1998).
2. Frodin, M. and Gammeltoft, S. Role and regulation of 90 kDa ribosomal S6 kinase (RSK) in signal transduction. *Mol. Cell. Endocrinol.* 151, 65–77 (1999).
3. Lazar, D. F. et al. Mitogen-activated Protein Kinase Kinase Inhibition Does Not Block the Stimulation of Glucose Utilization by Insulin. *J. Biol. Chem.* 270, 20801–20807 (1995).
4. Chen, R. et al. Phosphorylation of the c-Fos Transrepression Domain by Mitogen-Activated Protein Kinase and 90-kDa Ribosomal S6 Kinase. *Proc. Natl. Acad. Sci. USA* 90, 10952–10956 (1993).



**Fig 1.** Western blot analysis on A431 cell lysate using anti-Phospho-Rsk1 (pT359/pS363) RabMAb (cat. #2006-1); dilution 1:20,000. Cell lysates were (1) untreated, or (2) treated with EGF.



**Fig 2.** Immunohistochemical staining of (A) untreated and (B) Phosphatase-treated paraffin-embedded human cervical carcinoma using anti-Phospho-Rsk1 (pT359/pS363) RabMAb (cat. #2006-1).

Product QC'd by: \_\_\_\_\_

**For research use only. Not for use in diagnostic or therapeutic applications.**

*This product was manufactured under US Patents No. 5,675,063 and 5,599,681. For a complete list of protocols and available related products, please visit [www.epitomics.com](http://www.epitomics.com).*