

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse                                                                                                                                                                                                                                                                 |
| <b>Specificity</b>        | Detects human and mouse RSK1 when phosphorylated at S221, and human and mouse RSK2 when phosphorylated at S227.                                                                                                                                                             |
| <b>Source</b>             | Monoclonal Rabbit IgG Clone # 1019B                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Protein A or G purified from cell culture supernatant                                                                                                                                                                                                                       |
| <b>Immunogen</b>          | Phosphopeptide containing the human RSK1 S221 site                                                                                                                                                                                                                          |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### 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

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