

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat RSK isoforms when phosphorylated at sites corresponding to S380 of human RSK1.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Phosphopeptide containing human RSK1 S380 site
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

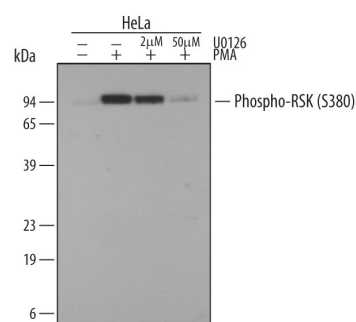
APPLICATIONS

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	0.1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	1 µg/mL	See Below

DATA

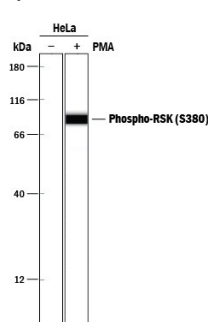
Western Blot



Detection of Human Phospho-RSK (S380) by Western Blot.

Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line untreated (-) or treated (+) with 200 nM PMA in the presence or absence of the indicated concentrations of the MEK1/2 inhibitor U0126 for 20 minutes. PVDF membrane was probed with 0.1 µg/mL of Rabbit Anti-Human/Mouse/Rat Phospho-RSK (S380) Pan Specific Antigen Affinity-purified Polyclonal Antibody (Catalog # AF889), followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Phospho-RSK (S380) at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western

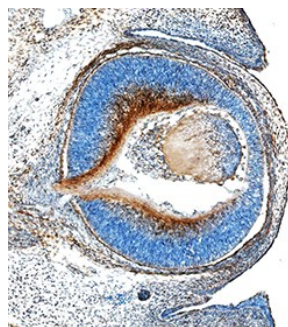


Detection of Human Phospho-RSK (S380) by Simple Western™.

Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line untreated (-) or treated (+) with 200 nM PMA for 20, loaded at 0.2 mg/mL. A specific band was detected for Phospho-RSK (S380) at approximately 90 kDa (as indicated) using 1 µg/mL of Rabbit Anti-Human/Mouse/Rat Phospho-RSK (S380) Pan Specific Antigen Affinity-purified Polyclonal Antibody (Catalog # AF889). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

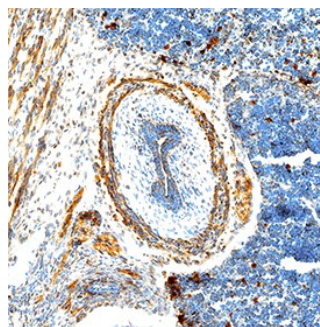


Immunohistochemistry



Phospho-RSK (S380) Pan Specific in Mouse Embryo. RSK phosphorylated at S380 was detected in immersion fixed frozen sections of mouse embryo (13 d.p.c.) using Rabbit Anti-Human/Mouse/Rat Phospho-RSK (S380) Pan Specific Antigen Affinity-purified Polyclonal Antibody (Catalog # AF889) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). Specific staining was localized to retinal cells. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

Immunohistochemistry



Phospho-RSK (S380) Pan Specific in Mouse Embryo. RSK phosphorylated at S380 was detected in immersion fixed frozen sections of mouse embryo (13 d.p.c.) using Rabbit Anti-Human/Mouse/Rat Phospho-RSK (S380) Pan Specific Antigen Affinity-purified Polyclonal Antibody (Catalog # AF889) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). Specific staining was localized to mesenchyme. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. 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	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The 90 kDa ribosomal protein S6 kinases (RSK1-4) are a family of broadly expressed Ser/Thr kinases activated in response to mitogenic stimuli, including growth factors and tumor-promoting phorbol esters. RSKs are directly phosphorylated by ERK1 and ERK2, leading to RSK autophosphorylation and activation. Active RSKs appear to play a major role in transcriptional regulation by translocating to the nucleus and phosphorylating c-Fos and CREB.