

Technical Data Sheet

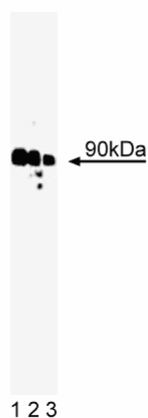
Purified Mouse Anti-Rsk

Product Information

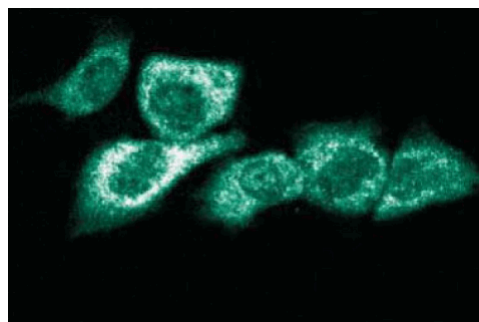
Material Number:	610226
Size:	150 µg
Concentration:	250 µg/ml
Clone:	78/RSK
Immunogen:	Human p90[rsk] aa. 1-184
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Human Tested in Development: Dog, Rat, Mouse, Chicken
Target MW:	90 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

The p90[rsk] (Rsk) and p70[s6k] kinases were first identified based on their ability to phosphorylate the 40S ribosomal protein S6 in vitro. Both of these enzymes are differentially regulated by serine/threonine phosphorylation in response to mitogenic stimulation. ERK1 and ERK2 have been shown to regulate Rsk activity. Once activated by this phosphorylation, a significant amount of Rsk can be found in the nucleus, suggesting that it has a role in nuclear signaling events. The regulation of nuclear Rsk and ERK activities by growth factors is coordinated with the induction of several early response genes. Rsk has also been shown to be activated by ionizing radiation, presumably through an activated MAP kinase. Studies in *Xenopus* oocytes and mouse NIH/3T3 cells indicate that inactive Rsk and ERK2 exist in a complex of approximately 110kDa. Upon phosphorylation of Rsk and ERK2, the heterodimer dissociates and at least a portion of these activated kinases translocate to the nucleus.



Western blot analysis of Rsk on A431 cells lysate.
Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of anti-Rsk antibody.



Immunofluorescent staining of Hs 766T cells.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20°C.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharming/en/protocols/Western_Blotting.shtml.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611447	A431 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Chung J, Pelech SL, Blenis J. Mitogen-activated Swiss mouse 3T3 RSK kinases I and II are related to pp44mpk from sea star oocytes and participate in the regulation of pp90rsk activity. *Proc Natl Acad Sci U S A*. 1991; 88(11):4981-4985.(Biology)

Hsiao KM, Chou SY, Shih SJ, Ferrell JE Jr. Evidence that inactive p42 mitogen-activated protein kinase and inactive Rsk exist as a heterodimer in vivo. *Proc Natl Acad Sci U S A*. 1994; 9(12):5480-5484.(Biology)

Majka M, Janowska-Wieczorek A, Ratajczak J. Stromal-derived factor 1 and thrombopoietin regulate distinct aspects of human megakaryopoiesis. *Blood*. 2000; 96(13):4142-4151.(Clone-specific: Western blot)

Moor AN, Gan XT, Karmazyn M, Fliegel L. Activation of Na⁺/H⁺ exchanger-directed protein kinases in the ischemic and ischemic-reperfused rat myocardium. *J Biol Chem*. 2001; 276(19):16113-16122.(Clone-specific: Western blot)

Morrione A, Navarro M, Romano G. The role of the insulin receptor substrate-1 in the differentiation of rat hippocampal neuronal cells. *Oncogene*. 2001; 20(35):4842-4852.(Clone-specific: Western blot)