

Anti-p70 S6K

Catalog# SPC-146F

Size: 400µl

PO Box 30244, Suite 405,
3989 Quadra Street,
Victoria, BC V8X 5E1, Canada

StressMarq

Biosciences Inc.

Orders ● sales@stressmarq.com

Tel: ● +1 250 294 9065

Fax: ● +1 250 294 9025

Email ● info@stressmarq.com

Web ● www.stressmarq.com

This product is for *in vitro* research use only and is not intended for use in humans or animals

Product	Rabbit anti-p70 S6K antibody; polyclonal
Clone	N/A
Immunogen	Human p70 S6K c-terminal peptide -KLH conjugates
Host and Subclass	Rabbit polyclonal
Cited Applications	WB (1), IP (1), ELISA
Specificity	Detects a ~70kDa protein, corresponding to the molecular mass of p70 S6K on SDS-PAGE immunoblots.
Species cross-reactivity	Human, Mouse, Rat, Bovine
Format	In TBS, 50% glycerol and 0.1%NaN ₃ Affinity Purified
Concentration and working dilution	250µg/mL; 1µg/mL was needed for western blot analysis
Storage and stability	-20°C; 1 year+; shipped on cold packs or ambient

result, S6K is a key player in the regulation of cell size, growth and glucose homeostasis.

Selected References

1. Gout, I. *et al.* (1998). *J Biol Chem.* 273 (46):30061-30064
2. Val'Ovka, TI. *et al.* (2000). *Ukr Biokhim Zh.* 72(3):31-7.
3. Kawasome, H. *et al.* (1998) *Proc. Natl. Acad. Sci.* 95
4. Montagne, J. *et al.* 1999) *Science* 285
5. Shima, H. *et al.* (1998) *EMBO J* 17: 6649-6659.
6. Lee-Fruman, K. *et al.* (1999) *Oncogene* 18: 5108- 5114.

Certificate of Analysis

0.25mg/mL was sufficient for detection of SPC-146 in lysates prepared from mouse muscle and mouse brain.

Scientific Background

Ribosomal S6 (S6K) belongs to the AGC family of Serine/Threonine protein kinases. There are two forms of S6K, alpha and beta, which have cytoplasmic and nuclear variants derived from alternative splicing (1). The activity of S6K is regulated by phosphorylation/dephosphorylation events in cellular responses to various extracellular stimuli. Its activity has also been shown to be dependent on nutrient availability (3-6). The mechanism of activation of S6K is a multi-step process which is achieved by phosphorylating the 40S ribosomal protein S6, which then upregulates the translation of mRNA transcripts containing an oligopyrimidine tract at the 5' transcriptional start site (3-6). Recently, a highly homologous ribosomal S6 kinase, termed S6K2, was identified. It has 70% amino acid identity in the overall sequence with S6K1, and highly conserved potential phosphorylation sites of S6K1. However, the N- and C-terminal domains of S6K2 are quite different (2). As a

Material Safety Data Sheet

Anti-p70 S6K (Polyclonal Antibody) SPC-146

This product is for *in vitro* research use only and is not intended for use in humans or animals

The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

Hazardous Ingredients

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Sodium Azide	26628-22-8	0.1

Physical Data

This product consists of rabbit immunoglobulin in TBS containing 0.1% azide in 50% glycerol shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.

Authorized: StressMarq Biosciences Inc.
Creation Date: 07/07/2007