

**p70 S6 Kinase (N-term) Rabbit Monoclonal Antibody
Product Data Sheet**

Catalog # 1494-1

Clone ID: E343 **Lot #:** C07262
Quantity: 100 µl
Type: Rabbit Monoclonal IgG
Species Cross-reactivity: Human Mouse Rat
Applications: WB IHC ICC Flow Cytometry IP
Molecular Wt.: 70 kDa
UniProt ID: P23443

Background: p70 S6 Kinase is a mitogen-activated Ser/Thr protein kinase that is required for cell growth and G1 cell cycle progression (1). p70 S6 kinase phosphorylates specifically ribosomal protein S6. Activation of p70 S6 kinase is controlled by multiple phosphorylation events located within the catalytic, linker and pseudosubstrate domains (2). Activation occurs via phosphorylation at Ser411, Thr421 and Ser424 within the pseudosubstrate region (3, 4). Phosphorylation of Thr229 in the catalytic domain and Thr389 in the linker domain are most critical for kinase function (2).

Specificity: A synthetic peptide corresponding to residues in N-terminus of human p70 S6 kinase was used as immunogen. This antibody detects both alpha I and alpha II isoforms.

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: 1:5,000-10,000
IHC: 1:100-250
Flow Cytometry: 1:20
IP: 1:80

Background References:

1. Pearson, R.B. and G. Thomas. Regulation of p70s6k/p85s6k and its role in the cell cycle. *Prog Cell Cycle Res.* 1: 21–32 (1995).
2. Pullen, N. and G. Thomas. The modular phosphorylation and activation of p70s6k. *FEBS Lett.* 410: 78–82 (1997).
3. Dufner, A. and G. Thomas. Ribosomal S6 kinase signaling and the control of translation. *Exp Cell Res.* 253: 100–9 (1999).
4. Le, X.F., et al. Paclitaxel induces inactivation of p70 S6 kinase and phosphorylation of Thr421 and Ser424 via multiple signaling pathways in mitosis. *Oncogene* 22: 484–97 (2003).

Product QC'd by: _____

kDa
150-
100-
75-
50-
37-
25-
20-



Fig 1. Western blot analysis on 293T cell lysate using anti-p70 S6 kinase (N-term) RabMAb (catalog #1494-1), dilution 1:10,000.

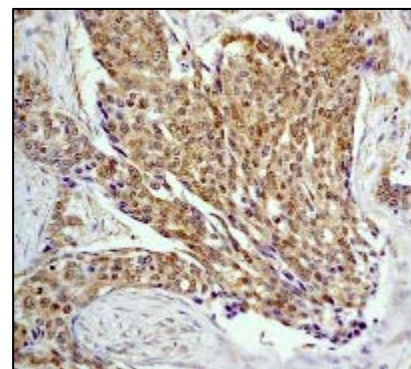


Fig 2. Immunohistochemical analysis of paraffin-embedded human breast adenocarcinoma using anti- p70 S6 kinase (N-term) RabMAb (catalog #1494-1)

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

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit www.epitomics.com.