



#2903 Store at -20C

p70 S6 Kinase Substrates Antibody Sampler Kit

1 Kit (6 x 20 microliters)

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Phospho-S6 Ribosomal Protein (Ser235/236) (D57.2.2E) XP [®] Rabbit mAb	4858	20 µl	32 kDa	Rabbit IgG
Phospho-S6 Ribosomal Protein (Ser240/244) (D68F8) XP [®] Rabbit mAb	5364	20 µl	32 kDa	Rabbit IgG
Phospho-eIF4B (Ser422) Antibody	3591	20 µl	80 kDa	Rabbit
Phospho-eEF2k (Ser366) Antibody	3691	20 µl	105 kDa	Rabbit
Phospho-p70 S6 Kinase (Thr389) (108D2) Rabbit mAb	9234	20 µl	70, 85 kDa	Rabbit IgG
p70 S6 Kinase (49D7) Rabbit mAb	2708	20 µl	70, 85 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The p70 S6 Kinase Substrates Antibody Sampler Kit provides a fast and economical means of evaluating several substrates of p70 S6 Kinase. The kit contains enough primary and secondary antibody to perform two Western blot experiments.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Background

p70 S6 kinase is a mitogen activated Ser/Thr protein kinase that is required for cell growth and G1 cell cycle progression (1,2). p70 S6 kinase phosphorylates the S6 protein of the 40S ribosomal subunit and is involved in translational control of 5' oligopyrimidine tract mRNAs (1). Important S6 ribosomal protein phosphorylation sites include several residues (Ser235, Ser236, Ser240, Ser244) located within a small, carboxy-terminal region of the S6 protein (3,4). p70 S6 kinase has been shown to phosphorylate eIF4B at the rapamycin-sensitive site Ser422 *in vivo*, and a Ser422Ala mutant of eIF4B shows diminished activity in an *in vitro* translation assay (5). Phosphorylation of eEF2K by p70 S6 kinase and p90RSK leads to inactivation of eEF2K (6), facilitating the dephosphorylation of eEF2 and thus promoting translation.

Background References

1. Pullen, N. and Thomas, G. (1997) *FEBS Lett* 410, 78-82.
2. Dufner, A. and Thomas, G. (1999) *Exp Cell Res* 253, 100-9.
3. Ferrari, S. et al. (1991) *J Biol Chem* 266, 22770-5.
4. Flotow, H. and Thomas, G. (1992) *J Biol Chem* 267, 3074-8.
5. Raught, B. et al. (2004) *EMBO J* 23, 1761-9.
6. Wang, X. et al. (2001) *EMBO J* 20, 4370-9.

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not

sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.