



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

Store at +4C
#5548

S6 Ribosomal Protein (54D2) Mouse mAb (Alexa Fluor® 647 Conjugate)

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

Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
IF-F, IF-IC, FC-FP	H M R Mk Dm	Endogenous	Mouse IgG1	#P62753	6194
Product Usage Information	Application				Dilution
	Immunofluorescence (Frozen)				1:50 - 1:100
	Immunofluorescence (Immunocytochemistry)				1:200 - 1:800
	Flow Cytometry (Fixed/Permeabilized)				1:50
Storage	Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.				
Specificity/Sensitivity	S6 Ribosomal Protein (54D2) Mouse mAb (Alexa Fluor® 647 Conjugate) detects endogenous levels of total S6 ribosomal protein.				
Source / Purification	Monoclonal antibody is produced by immunizing animals with a recombinant fusion protein corresponding to full-length human S6 ribosomal protein.				
Description	This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 647 fluorescent dye and tested in-house for direct flow cytometry and immunofluorescent analysis in human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated S6 Ribosomal Protein (54D2) Mouse mAb #2317.				
Background	One way that growth factors and mitogens effectively promote sustained cell growth and proliferation is by upregulating mRNA translation (1,2). Growth factors and mitogens induce the activation of p70 S6 kinase and the subsequent phosphorylation of S6 ribosomal protein. Phosphorylation of S6 ribosomal protein correlates with an increase in translation of mRNA transcripts that contain an oligopyrimidine tract in their 5' untranslated regions (2). These particular mRNA transcripts (5'TOP) encode proteins involved in cell cycle progression, as well as ribosomal proteins and elongation factors necessary for translation (2,3). Important S6 ribosomal protein phosphorylation sites include several residues (Ser235, Ser236, Ser240, and Ser244) located within a small, carboxy-terminal region of S6 protein (4,5).				
Background References	<ol style="list-style-type: none"> Dufner, A. and Thomas, G. (1999) <i>Exp Cell Res</i> 253, 100-9. Peterson, R.T. and Schreiber, S.L. (1998) <i>Curr Biol</i> 8, R248-50. Jefferies, H.B. et al. (1997) <i>EMBO J</i> 16, 3693-704. Ferrari, S. et al. (1991) <i>J Biol Chem</i> 266, 22770-5. Flotow, H. and Thomas, G. (1992) <i>J Biol Chem</i> 267, 3074-8. 				
Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).				
Applications Key	IF-F: Immunofluorescence (Frozen) IF-IC: Immunofluorescence (Immunocytochemistry) FC-FP: Flow Cytometry (Fixed/Permeabilized)				
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey Dm: D. melanogaster				
Trademarks and Patents	Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is conditioned on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not (1) use this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; or (c) manufacturing or quality assurance or quality control, and/or (2) sell or transfer this product or its components for resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.				

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.