

#5317
Store at +4°C**S6 Ribosomal Protein (54D2)
Mouse mAb (Alexa Fluor® 488
Conjugate)****Cell Signaling**
TECHNOLOGY®**Orders:** 877-616-CELL (2355)
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cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications: IF-F, IF-IC, FC-FP	Reactivity: H M R Mk Dm	Sensitivity: Endogenous	Source/Isotype: Mouse IgG1	UniProt ID: #P62753	Entrez-Gene Id: 6194
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Product Usage Information	Application Immunofluorescence (Frozen) Immunofluorescence (Immunocytochemistry) Flow Cytometry (Fixed/Permeabilized)	Dilution 1:200 - 1:800 1:200 - 1:800 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® 488 Conjugate) detects endogenous levels of total S6 ribosomal protein independent of phosphorylation.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a recombinant fusion protein corresponding to full-length human S6 ribosomal protein.	
Product Description	This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 488 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	1. Dufner, A. and Thomas, G. (1999) <i>Exp Cell Res</i> 253, 100-9. 2. Peterson, R.T. and Schreiber, S.L. (1998) <i>Curr Biol</i> 8, R248-50. 3. Jefferies, H.B. et al. (1997) <i>EMBO J</i> 16, 3693-704. 4. Ferrari, S. et al. (1991) <i>J Biol Chem</i> 266, 22770-5. 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 Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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