

Store at
4°C

S6 Ribosomal Protein (54D2) Mouse mAb (PE Conjugate)

#55594

Support: +1-978-867-2388 (U.S.)
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orders@cellsignal.comEntrez-Gene ID #6194
UniProt ID #P62753

New 06/16

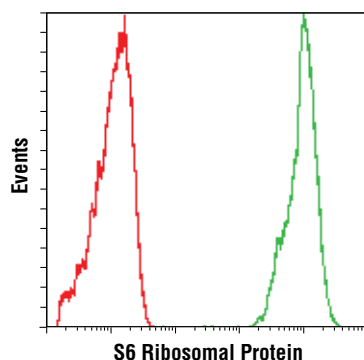
For Research Use Only. Not For Use In Diagnostic Procedures.**Applications**
F
Endogenous**Species Cross-Reactivity***
H, M, R, Mk, Dm**Isotype**
Mouse IgG1

Description: This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometry analysis in human cells. This 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 the 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 the S6 protein (4,5).

Specificity/Sensitivity: S6 Ribosomal Protein (54D2) Mouse mAb (PE 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.



Flow cytometric analysis of Jurkat cells using S6 Ribosomal Protein (54D2) Mouse mAb (PE Conjugate) compared to concentration-matched Mouse (G3A1) mAb IgG1 Isotype Control (PE Conjugate) #6899.

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

***Species cross-reactivity is determined by western blot using the unconjugated antibody.**

Recommended Antibody Dilutions:
Flow Cytometry 1:50

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com Background References:

- (1) Dufner, A. and Thomas, G. (1999) *Exp Cell Res* 253, 100-9.
- (2) Peterson, R.T. and Schreiber, S.L. (1998) *Curr Biol* 8, R248-50.
- (3) Jefferies, H.B. et al. (1997) *EMBO J* 16, 3693-704.
- (4) Ferrari, S. et al. (1991) *J Biol Chem* 266, 22770-5.
- (5) Flotow, H. and Thomas, G. (1992) *J Biol Chem* 267, 3074-8.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide **Species Cross-Reactivity:** H—human M—mouse R—rat Hm—hamster Mk—monkey 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 All—all species expected *Species enclosed in parentheses are predicted to react based on 100% homology.