

Store at
-20C
#62016**Phospho-S6 Ribosomal Protein
(Ser235/236) (E2R1O) Mouse mAb****Orders:** 877-616-CELL (2355)
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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IF-IC	H M R Mk	Endogenous	32	Mouse IgG2b	#P62753	6194

Product Usage Information**Application**Western Blotting
Immunofluorescence (Immunocytochemistry)**Dilution**1:1000
1:400**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.

Specificity/Sensitivity

Phospho-S6 Ribosomal Protein (Ser235/236) (E2R1O) Mouse mAb detects endogenous levels of S6 ribosomal protein only when phosphorylated at Ser235 and Ser236.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser235 and Ser236 of human S6 ribosomal protein.

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) *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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key**W:** Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)**Cross-Reactivity Key****H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey**Trademarks and Patents**

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