

#2013 Store at -20C

eIF4A (C32B4) Rabbit mAb



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

Applications: WB	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 48	Source/Isotype: Rabbit IgG	UniProt ID: #Q14240, #P60842, #P38919	Entrez-Gene Id: 1974, 1973, 9775
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Product Usage Information	Application Western Blotting	Dilution 1:1000
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	eIF4A (C32B4) Rabbit mAb detects endogenous levels of total eIF4A protein.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Met316 of human eIF4A protein.	
Background	A variety of factors contribute to the important biological event of initiation of translation. The eIF4F complex of translation initiation factors binds to the 5' m7 GTP cap to open up the mRNA secondary structure and allow small ribosome subunit binding (1). eIF4A, an eIF4 complex component that acts as an ATP-dependent RNA helicase, unwinds the secondary structure of the 5' mRNA untranslated region to mediate ribosome binding (2,3). In addition, eIF4A has recently been shown to repress Dpp/BMP signalling in a translation-independent manner in <i>Drosophila</i> (4,5).	
Background References	<ol style="list-style-type: none"> 1. Rogers, G.W. et al. (2001) <i>J. Biol. Chem.</i> 276, 12598-12608. 2. Rogers, G.W. et al. (1999) <i>J. Biol. Chem.</i> 274, 12236-12244. 3. Svitkin, Y.V. et al. (2001) <i>RNA</i> 7, 382-394. 4. Li, J. and Li, W.X. (2006) <i>Nat. Cell Biol.</i> 8, 1407-1414. 5. Affolter, M. and Pyrowolakis, G. (2006) <i>Nat. Cell Biol.</i> 8, 1319-1321. 	

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 BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
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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