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#2425

eIF4A (F52) Antibody

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

Applications: W	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 48	Source/Isotype: Rabbit	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 and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
Specificity/Sensitivity	eIF4A (F52) Antibody detects endogenous levels of total eIF4A1, eIF4A2 and eIF4A3 proteins.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Phe52 of human eIF4A. Antibodies are purified by protein A and peptide affinity chromatography.	
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' m ⁷ 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	W: Western Blotting
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey
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