

eIF4A (C32B4) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	48	Rabbit IgG	#Q14240, #P60842, #P38919	1974, 1973, 9775

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 translation initiation. The eukaryotic initiation factor 4F (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 signaling in a translation-independent manner in *Drosophila* (4,5).

Background References

1. Rogers, G.W. et al. (2001) *J. Biol. Chem.* 276, 12598-12608.
2. Rogers, G.W. et al. (1999) *J. Biol. Chem.* 274, 12236-12244.
3. Svitkin, Y.V. et al. (2001) *RNA* 7, 382-394.
4. Li, J. and Li, W.X. (2006) *Nat. Cell Biol.* 8, 1407-1414.
5. Affolter, M. and Pyrowolakis, G. (2006) *Nat. Cell Biol.* 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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