

eIF4A (C32B4) Rabbit mAb

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W Endogenous	H, M, R, Mk	48 kDa	Rabbit IgG**

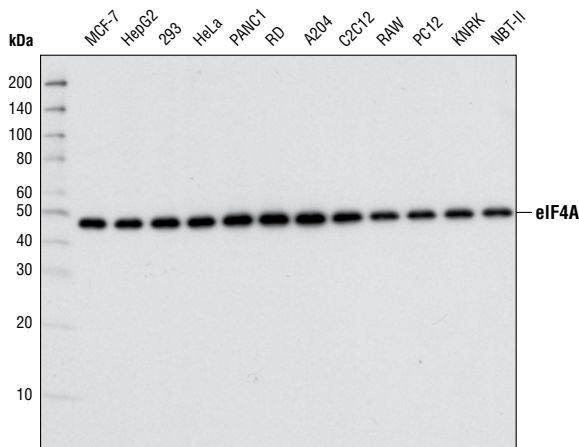
Background: A variety of factors contribute to the important biological event of initiation of translation. The eIF4F complex of translation initiation factors binds to the 5' m⁷ GTP cap to open up the mRNA secondary structure and allow small ribosome subunit binding (1). eIF4A, an eIF4 complex component 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 *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.

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.



Western blot analysis of extracts from various cell types using eIF4A (C32B4) Rabbit mAb.

Entrez-Gene ID #1973
Swiss-Prot Acc. #P60842

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.

*Species cross-reactivity is determined by western blot.

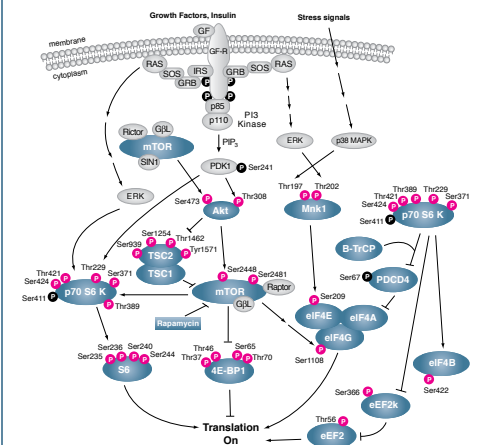
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.



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

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: 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.