

Store at
-20°C

eIF4A (C32B4) Rabbit mAb

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#2013

Support: 877-678-TECH (8324)
info@cellsignal.comOrders: 877-616-CELL (2355)
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Entrez-Gene ID #9775, 1973, 1974
UniProt ID #P38919, P60842, Q14240

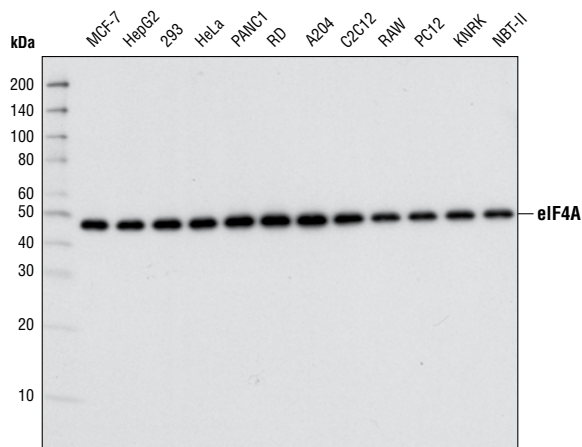
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Applications
W
EndogenousSpecies Cross-Reactivity*
H, M, R, MkMolecular Wt.
48 kDaIsotype
Rabbit IgG**

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).

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.

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 product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

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.

U. S. Patent No. 5,675,063

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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.

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