

# eIF4A (F52) Antibody

✓ 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.

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

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

**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<sup>7</sup> 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 (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 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.

**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.

\*Species cross-reactivity is determined by western blot.

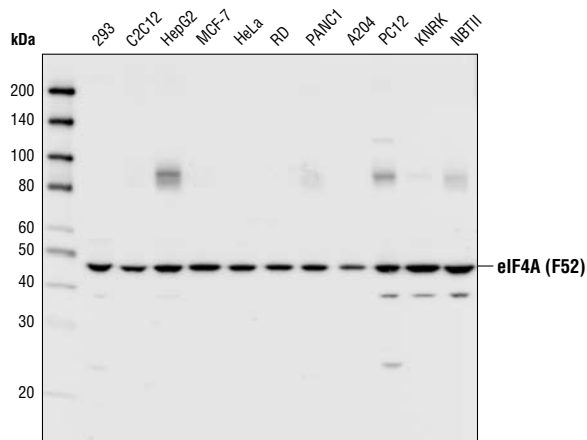
\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western blotting 1:1000

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.



Western blot analysis of extracts from various cell types using eIF4A (F52) Antibody.

**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.