

eIF4B 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.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	80 kDa	Rabbit**

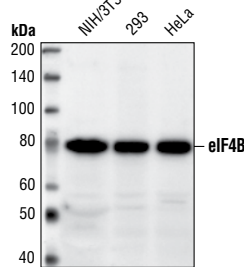
Background: Eukaryotic initiation factor 4B (eIF4B) is thought to assist the eIF4F complex in translation initiation. In plants, eIF4B is known to interact with the poly-(A) binding protein, increasing its poly-(A) binding activity (1). Heat shock and serum starvation cause dephosphorylation of eIF4B at multiple sites with kinetics similar to those of the corresponding inhibition of translation, while phosphorylation of eIF4B following insulin treatment correlates well with an observed increase in translation (2-5). Multiple kinases, including p70 S6 kinase, can phosphorylate eIF4B *in vitro*, and at least one serum-inducible eIF4B phosphorylation site is sensitive to rapamycin and LY294002 (6).

Specificity/Sensitivity: eIF4B Antibody recognizes endogenous levels of eIF4B, independent of phosphorylation.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues at the amino terminus of human eIF4B. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Le, H. et al. (1997) *J. Biol. Chem.* 272, 16247–16255.
- (2) Duncan, R.F. and Hershey, J.W. (1989) *J. Cell Biol.* 109, 1467–1481.
- (3) Duncan, R.F. and Hershey, J.W. (1984) *J. Biol. Chem.* 259, 11882–11889.
- (4) Duncan, R. and Hershey, J.W. (1985) *J. Biol. Chem.* 260, 5493–5497.
- (5) Manzella, J.M. et al. (1991) *J. Biol. Chem.* 266, 2383–2389.
- (6) Gingras, A.C. et al. (2001) *Genes Dev.* 15, 807–826.



Western blot analysis of extracts from HeLa, 293 and NIH/3T3 cells using eIF4B Antibody.

Entrez-Gene ID #1975
Swiss-Prot Acc. #P23588

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.

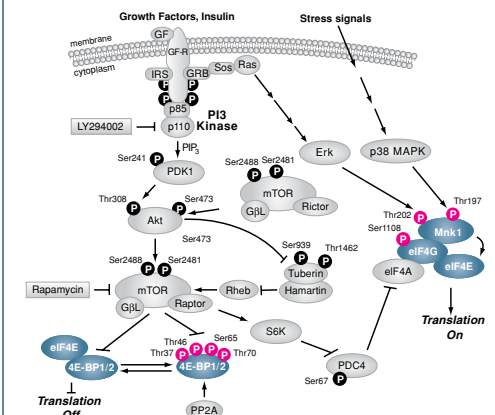
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western Blotting 1:1000

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

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.