

eEF1A 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 # 1915
Swiss-Prot Acc. # P68104

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC Endogenous	H, M, R, Mk, (X)	50 kDa	Rabbit**

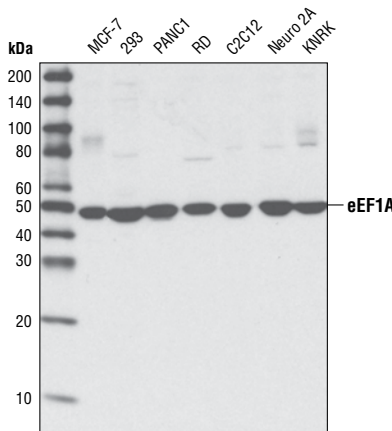
Background: Translation is the process where amino acid residues are assembled into polypeptides on ribosomes. This process is generally divided into three stages: initiation, elongation and termination. During elongation, mRNA and tRNA pair at the two active sites (A and P sites) on the ribosome. A variety of eukaryotic elongation factors (eEFs) are involved in this process in mammalian cells (1). eEF1A, also called elongation factor Tu (EF-Tu), binds GTP and then interacts with amino acyl-tRNAs and promotes the recruitment of amino acyl-tRNAs to the A-site of the ribosome (1). After GTP hydrolysis, GDP-eEF1A leaves the ribosome and is later converted back to the GTP-eEF1A by eEF1B (1). Studies have shown that eEF1A is phosphorylated under certain conditions, indicating that its activity is regulated at the post-translational level (2,3).

Specificity/Sensitivity: eEF1A Antibody detects endogenous levels of total eEF1A protein.

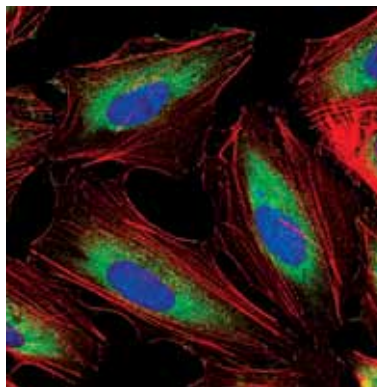
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to a sequence at the C-terminal end of human eEF1A. Antibodies are purified by peptide affinity chromatography.

Background References:

- (1) Browne, G.J. and Proud, C.G. (2002) *Eur J Biochem* 269, 5360–8.
- (2) Venema, R.C. et al. (1991) *J Biol Chem* 266, 12574–80.
- (3) Venema, R.C. et al. (1991) *J Biol Chem* 266, 11993–8.



Western blot analysis of extracts from various cell types using eEF1A Antibody.



Confocal immunofluorescent analysis of HeLa cells using eEF1A Antibody (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudocolor = DRAQ5® #4048 (fluorescent DNA dye).

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
Immunofluorescence (IF-IC) 1:25

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.

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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.

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.