

eEF1A Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IF-IC	H M R Mk	Endogenous	50	Rabbit	#P68104	1915

Product Usage Information**Application**

Western Blotting
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:25

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.

Specificity/Sensitivity

eEF1A Antibody detects endogenous levels of total eEF1A protein.

Species predicted to react based on 100% sequence homology

Xenopus

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

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 number 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 interacts with amino acyl-tRNAs to promote 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).

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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

W: Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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