

**eEF1A (D10A5) Rabbit mAb**

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

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**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.

**Specificity/Sensitivity**

eEF1A (D10A5) Rabbit mAb detects endogenous levels of total eEF1A protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu60 of human eEF1A protein.

**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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

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

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