Revision 1

Store at -20C

#2551

eEF1A Antibody

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

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	Dilution
Western Blotting	1:1000
Immunofluorescence (Immunocytochemistry)	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

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

Alexa Fluor is a registered trademark of Life Technologies Corporation.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.