

# Anti-eEF2K (C-terminus) Antibody

Catalog # AN1761

### Specification

# Anti-eEF2K (C-terminus) Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC <u>O00418</u> Bovine, Chicken, Drosophila, C.Elegans Rabbit Rabbit Polyclonal IgG 82144

## Anti-eEF2K (C-terminus) Antibody - Additional Information

Gene ID 29904 Other Names eEF-2, eEF-2K, CaMK-III, eukaryotic elongation factor

### Target/Specificity

Eukaryotic elongation factor 2 (eEF2) catalyzes the translocation of peptidyl-tRNA from the A site to the P site on the ribosome. eEF2 kinase (eEF2K) phosphorylates and inactivates eEF2, resulting in the inhibition of peptide-chain elongation. eEF2K is normally dependent on Ca2+ ions and calmodulin, and can be activated by PKA in response to elevated cAMP levels during cell stress- or starvation-related conditions. Regulation of eEF2K occurs through phosphorylation at multiple sites. Ser-78 phosphorylation is required for calmodulin binding and eEF2K activity, while phosphorylation of Ser-500 is required for Ca2+/calmodulin-independent kinase activity. Thr-348 is an autophosphorylation site that is required for kinase activity. Inhibitory phosphorylation may also regulate eEF2K, since phosphorylation at Ser-359 by SAPK4/p38delta causes inactivation of eEF2K. Thus, multisite phospho-regulation of eEF2K may be important for proper control of eEF2K activity and protein translation.

**Dilution** WB~~1:1000 IHC~~1:100~500

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-eEF2K (C-terminus) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

Anti-eEF2K (C-terminus) Antibody - Protocols



Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Anti-eEF2K (C-terminus) Antibody - Images



Western blot image of eEF2K in human A431 (lane 1), Jurkat (lane 2), and HeLa (lane 3) cells, and immunoprecipitation of eEF2K from HeLa cell lysate using anti-eEF2K (C-terminus) antibody (lanes 4 & 6). Negative control immunoprecipitations with no antibody are shown in lane 5 and 7. The blots were probed with anit-eEF2K (C-terminus) (lanes 1-5) or with anti-eEF2K (N-terminal) antibody (lanes 6 & 7).



Immunocytochemical labeling of eEF2K in paraformaldehyde fixed and NP-40 permeabilized A431 cells. The cells were labeled with rabbit polyclonal anti-eEF2K (EP4661). The antibody was detected using goat anti-rabbit DyLight® 594.

# Anti-eEF2K (C-terminus) Antibody - Background

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regulate eEF2K, since phosphorylation at Ser-359 by SAPK4/p38delta causes inactivation of eEF2K. Thus, multisite phospho-regulation of eEF2K may be important for proper control of eEF2K activity and protein translation.