

**EEF2K Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8162a****Specification**

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**EEF2K Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession [O00418](#)  
Other Accession [NP\\_037434](#)

**EEF2K Antibody (N-term) Blocking Peptide - Additional Information**

**Gene ID** 29904

**Other Names**

Eukaryotic elongation factor 2 kinase, eEF-2 kinase, eEF-2K, Calcium/calmodulin-dependent eukaryotic elongation factor 2 kinase, EEF2K

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8162a](/product/products/AP8162a) was selected from the N-term region of human EEF2K. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**EEF2K Antibody (N-term) Blocking Peptide - Protein Information**

**Name** EEF2K

**Function**

Threonine kinase that regulates protein synthesis by controlling the rate of peptide chain elongation. Upon activation by a variety of upstream kinases including AMPK or TRPM7, phosphorylates the elongation factor EEF2 at a single site, renders it unable to bind ribosomes and thus inactive. In turn, the rate of protein synthesis is reduced.

**EEF2K Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **EEF2K Antibody (N-term) Blocking Peptide - Images**

#### **EEF2K Antibody (N-term) Blocking Peptide - Background**

Eukaryotic elongation factor 2 kinase (eEF2k) phosphorylates and inactivates eEF2, thereby inhibiting peptide-chain elongation. eEF2k, which is  $\text{Ca}^{2+}$  and calmodulin dependent, can be activated by PKA in response to stress-induced elevation of cAMP levels. eEF2k expression is also modulated by a wide range of stimuli that promote cell growth and protein synthesis. Phosphorylation of eEF2k by p90RSK and p70 S6 kinase at Ser366 or by SAPK4/p38d at Ser359, inactivates eEF2k, which facilitates the dephosphorylation of eEF2, and thus promotes translation.

#### **EEF2K Antibody (N-term) Blocking Peptide - References**

Mol. Cell. Biol. 24 (7), 2986-2997 (2004)J. Biol. Chem. 279 (13), 12220-12231 (2004)Biochem. J. 367 (PT 2), 525-532 (2002)EMBO J. 20 (16), 4370-4379 (2001)