

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

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 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)