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PRODUCT DATASHEET

Anti-eEF2K (Ser-500), Phosphospecific Antibody

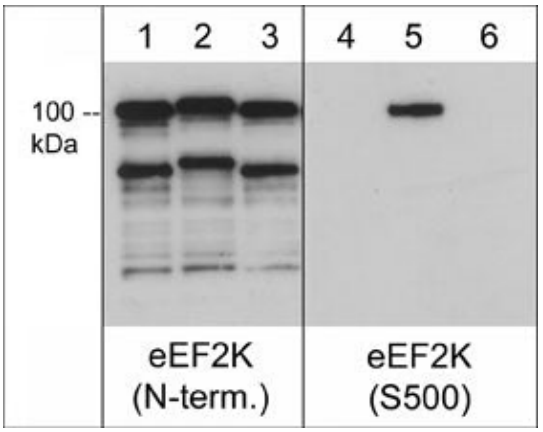
phosphosolutions ANTIBODIES THAT WORK

Product Details

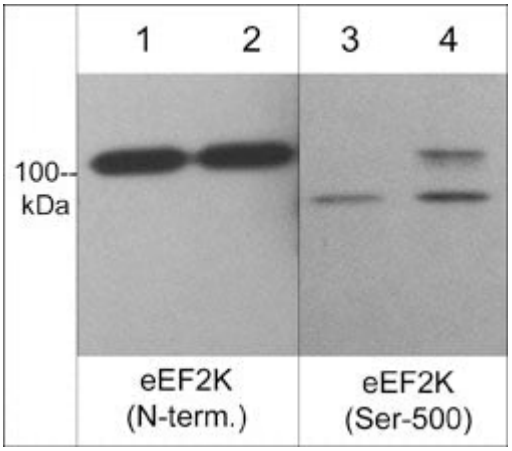
Available Variants	100 µL (SKU:EP4451)
Conjugate	Unconjugated
Isotype	IgG
Gene Name	EEF2K
Host Species	Rabbit
Format	Antigen Affinity Purified
Physical State	Liquid
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Applications	ELISA, WB
Dilution Ranges	WB: 1:1000
Species Reactivity	Human, Mouse, Rat
Immunogen	Phospho-eEF2K (Ser-500) synthetic peptide (coupled to carrier protein) corresponds to amino acids surrounding Ser-500 in human eEF2K. This sequence is well conserved in rat and mouse eEF2K, and has low homology to other proteins.
Specificity	The antibody detects a 105 kDa* protein corresponding to the molecular mass of eEF2K on SDS-PAGE immunoblots of human recombinant eEF2K autophosphorylated in the presence of Ca2+ and Calmodulin. This reactivity is removed after lambda phosphatase treatment. In addition, the antibody detects eEF2K after calyculin A treatment of mouse C2C12 cells, but not in control cells.
Molecular Weight	105
Quality Control	Western blots performed on each lot.
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at

	-20°C.
UniProt ID	O00418 UniProt Summary: 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.
Country of Origin	United States
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
Post Translational Modification Type	Phosphorylated
Post Translational Modification Residue	Ser-500
NCBI Gene ID	29904

Product Images



Recombinant human eEF2K untreated (lanes 1 & 4), auto-phosphorylated in the presence of Ca2+ and Calmodulin (lanes 2 & 5), and dephosphorylated with lambda phosphatase (lanes 3 & 6). The blots were probed with rabbit polyclonal anti-eEF2K (N-terminus) (lanes 1-3) or anti-eEF2K (Ser-500) (lanes 4-6). (Images provided by the laboratory of Dr. Kevin Dalby in the Dept. of Pharmacy at the University of Texas at Austin.)



Western blot image of C2C12 untreated (lanes 1 & 3) or treated with calyculin A (100 nM) for 30 min. (lanes 2 & 4). The blot was probed with anti-eEF2K (N-terminus) (lanes 1 & 2) and anti-eEF2K (Ser-500) (lanes 3 & 4).