真核延伸因子激酶 2 抗体

产品货号： mlR3612

英文名称： EEF2k

中文名称： 真核延伸因子激酶 2 抗体

别　　名： Calcium/calmodulin dependent eukaryotic elongation factor 2; Calcium/calmodulin dependent eukaryotic elongation factor 2 kinase; Calmodulin dependent protein kinase III; cb365; eEF 2 kinase; eEF 2K; EEF2K protein; Elongation factor 2 kinase; Eukaryotic elongation factor 2 kinase; kinase eEF2K; SMEF2K; EF2K_HUMAN.

研究领域： 肿瘤　细胞生物　免疫学　信号转导　转录调节因子　激酶和磷酸酶

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应　： Human, Mouse, Rat, Dog, Pig, Horse,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需做抗原修复）
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

分 子 量： 82kDa

细胞定位： 细胞浆

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human EEF2k:551-650/725

mlbio 酶联生物
Good elisakit producers

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 ° C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ° C.

PubMed： PubMed

产品介绍： Eukaryotic elongation factor 2 kinase (EEF2k) previously known as Ca2+/calmodulin dependent protein kinase III, is an abundant cytoplasmic protein highly specific for elongation factor 2 (eEf2). Phosphorylation of eEF2 by eEF2 kinase on specific threonine residues results in the inactivation of eEF-2 and in termination of mRNA translation. The activity of eEF2 kinase is not only dependent upon Ca2+ ions, calmodulin (CaM) and insulin, but is also regulated both negatively and positively via phosphorylation by different protein kinases (AMPK, S6K1, p90 RSK). There is also evidence that eEF-2 phosphorylation is involved in the regulation of cell cycle progression, cellular differentiation, oogensis and malignant tumors.

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 TRM7, 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.

Subunit:

Monomer or homodimer.

Post-translational modifications:

Autophosphorylated. Phosphorylated by AMP-activated protein kinase AMPK at Ser-398 leading to EEF2K activation and protein synthesis inhibition. Phosphorylated by TRPM7 at Ser-78 resulting in improved protein stability, higher EE2F phosphorylated and subsequently reduced rate of protein synthesis. Phosphorylation by other kinases such as CDK1 and MAPK13 at Ser-359 or RPS6KA1 and RPS6KB1 at Ser-366 instead decrease EEF2K activity and promote protein synthesis.

Similarity:

Belongs to the protein kinase superfamily. Alpha-type protein kinase family.

Contains 1 alpha-type protein kinase domain.

SWISS:

O00418

Gene ID:

29904

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.