小鼠抗蛋白激酶样内质网激酶单克隆抗体

产品货号： mIR51385

英文名称： EIF2AK3/PERK

中文名称： 小鼠抗蛋白激酶样内质网激酶单克隆抗体

别　　名： DKFZp781H1925; E2AK3_HUMAN; EC 2.7.11.1; EIF2AK3; Eukaryotic translation initiation factor 2 alpha kinase 3; Eukaryotic translation initiation factor 2-alpha kinase 3; Heme regulated EIF2 alpha kinase; HRI; HsPEK; Pancreatic eIF2 alpha kinase; Pancreatic eIF2-alpha kinase; PEK; PRKR like endoplasmic reticulum kinase; PRKR-like endoplasmic reticulum kinase; WRS.

研究领域： 免疫学　染色质和核信号　信号转导　新陈代谢　表观遗传学

抗体来源： Mouse

克隆类型： Monoclonal

克 隆 号： 3C3

交叉反应： Human, Mouse, Rat,

产品应用： WB=1:200-1000 ELISA=1:500-1000

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 122kDa

细胞定位： 细胞浆

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： Recombinant human EIF2AK3:

亚　　型： IgG1

纯化方法： affinity purified by Protein G

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 ： The protein encoded by this gene phosphorylates the alpha subunit of eukaryotic translation-initiation factor 2 (EIF2), leading to its inactivation, and thus to a rapid reduction of translational initiation and repression of global protein synthesis. It is a type I membrane protein located in the endoplasmic reticulum (ER), where it is induced by ER stress caused by malfolded proteins. Mutations in this gene are associated with Wolcott-Rallison syndrome. [provided by RefSeq, Jan 2010]

Function:

Phosphorylates the alpha subunit of eukaryotic translation-initiation factor 2 (EIF2), leading to its inactivation and thus to a rapid reduction of translational initiation and repression of global protein synthesis. Serves as a critical effector of unfolded protein response (UPR)-induced G1 growth arrest due to the loss of cyclin-D1 (CCND1).

Subunit:

Forms dimers with HSPA5/BIP in resting cells. Oligomerizes in ER-stressed cells. Interacts with DNAJC3.

Subcellular Location:

Endoplasmic reticulum membrane; Single-pass type I membrane protein.

Tissue Specificity:

Ubiquitous. A high level expression is seen in secretory tissues.

Post-translational modifications:

Oligomerization of the N-terminal ER luminal domain by ER stress promotes PERK trans-autophosphorylation of the C-terminal cytoplasmic kinase domain at multiple residues including Thr-982 on the kinase activation loop.

Autophosphorylated. Phosphorylated at Tyr-619 following endoplasmic reticulum stress, leading to activate its tyrosine-protein kinase activity. Dephosphorylated by PTPN1/TP1B, leading to inactivate its enzyme activity.

N-glycosylated.

ADP-ribosylated by PARP16 upon ER stress, which increases kinase activity.

DISEASE:

Wolcott-Rallison syndrome (WRS) [MIM:226980]: A rare autosomal recessive disorder, characterized by permanent neonatal or early infancy insulin-dependent diabetes and, at a later age, epiphyseal dysplasia, osteoporosis, growth retardation and other multisystem manifestations, such as hepatic and renal dysfunctions, mental retardation and cardiovascular abnormalities. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily.

Contains 1 protein kinase domain.

SWISS:

Q9NZJ5

Gene ID:

9451

Important Note:

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

mlbio 酶联生物
Good elisakit producers