

产品名称: PERK Rabbit Polyclonal Antibody
产品货号: APRab15978



产品概述 (Summary)

产品名称 (Production Name)	PERK Rabbit Polyclonal Antibody
描述 (Description)	Rabbit polyclonal Antibody
宿主 (Host)	Rabbit
应用 (Application)	WB,IHC,ICC/IF,ELISA
种属反应性 (Reactivity)	Human,Mouse,Rat

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Polyclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	EIF2AK3
别名 (Alternative Names)	EIF2AK3; PEK; PERK; Eukaryotic translation initiation factor 2-alpha kinase 3; PRKR-like endoplasmic reticulum kinase; Pancreatic eIF2-alpha kinase; HsPEK
基因 ID (Gene ID)	9451.0
蛋白 ID (SwissProt ID)	Q9NZJ5.The antiserum was produced against synthesized peptide derived from human EIF2AK3. AA range:947-996

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
蛋白分子量 (Molecular Weight)	125kDa

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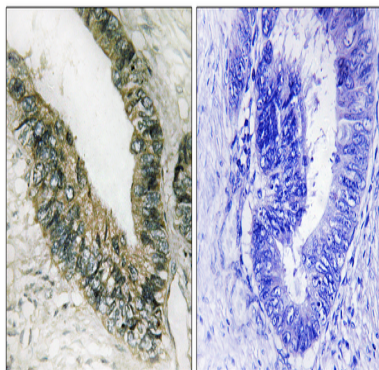
研究背景 (Background)

The protein encoded by this gene phosphorylates the alpha subunit of eukaryotic translation-initiation factor 2, leading to its inactivation, and thus to a rapid reduction of translational initiation and repression of global protein synthesis. This protein is thought to modulate mitochondrial function. It is a type I membrane protein located in the endoplasmic reticulum (ER), where it is induced by ER stress caused by malformed proteins. Mutations in this gene are associated with Wolcott-Rallison syndrome. [provided by RefSeq, Sep 2015], catalytic activity: ATP + a protein = ADP + a phosphoprotein., disease: Defects in EIF2AK3 are the cause of Wolcott-Rallison syndrome (WRS) [MIM:226980]; also known as multiple epiphyseal dysplasia with early-onset diabetes mellitus. WRS is 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., domain: The luminal domain senses perturbations in protein folding in the ER, probably through reversible interaction with HSPA5/BIP., enzyme regulation: Perturbation in protein folding in the endoplasmic reticulum (ER) promotes reversible dissociation from HSPA5/BIP and oligomerization, resulting in transautophosphorylation and kinase activity induction., 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., induction: By ER stress., PTM: Autophosphorylated., PTM: N-glycosylated., similarity: Belongs to the protein kinase superfamily., similarity: Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily., similarity: Contains 1 protein kinase domain., subunit: Forms dimers with HSPA5/BIP in resting cells. Oligomerizes in ER-stressed cells. Interacts with DNAJC3., tissue specificity: Ubiquitous. A high level expression is seen in secretory tissues.,

研究领域 (Research Area)

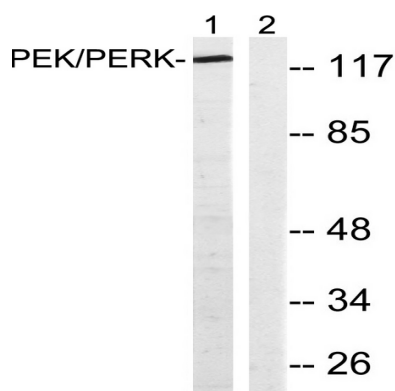
Alzheimer's disease;

图片 (Image Data)

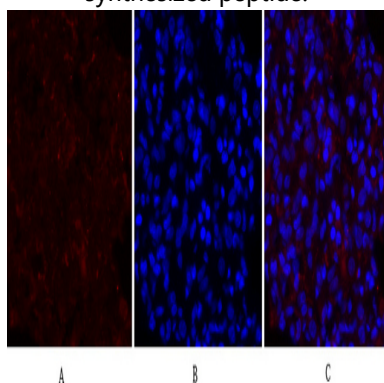


Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using PERK/PERK Antibody. The picture on the right is blocked with the synthesized peptide.

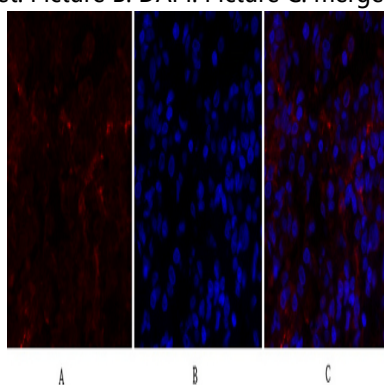
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Western blot analysis of lysates from MCF-7 cells, using PEK/PERK Antibody. The lane on the right is blocked with the synthesized peptide.

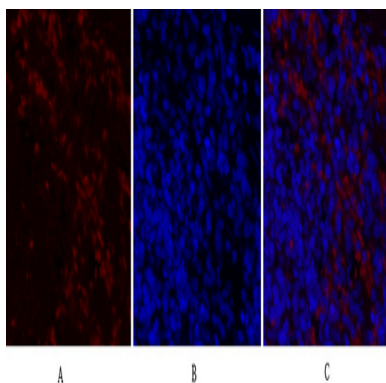


Immunofluorescence analysis of rat-lung tissue. 1, PERK Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



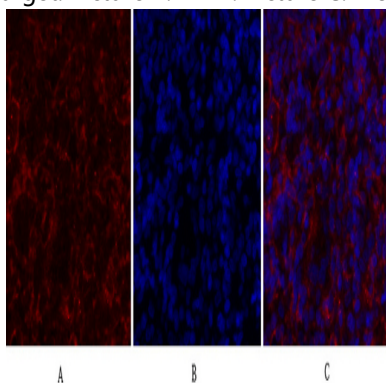
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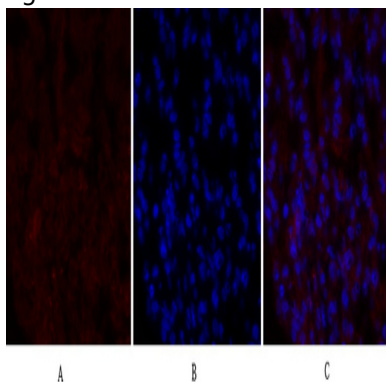
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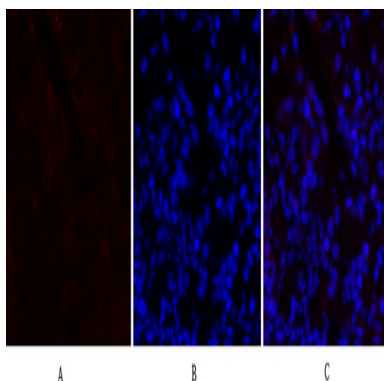
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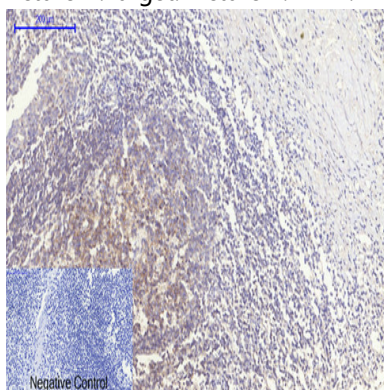


Immunofluorescence analysis of mouse-lung tissue. 1, PERK Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

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Immunofluorescence analysis of mouse-lung tissue. 1, PERK Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1, PERK Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

注意事项 (Note)

For research use only.