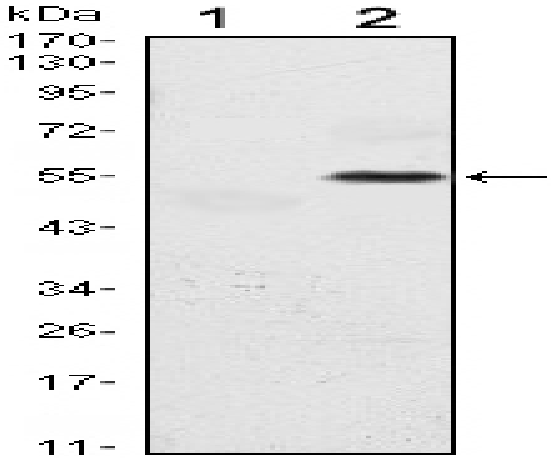
Best Tools for immunology Research

PERK Monoclonal Antibody

Catalog No :	YM0517
Reactivity :	Human
Applications :	WB;ELISA
Target :	PERK
Fields :	>>Mitophagy - animal;>>Autophagy - animal;>>Protein processing in endoplasmic reticulum;>>Apoptosis;>>Non-alcoholic fatty liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Hepatitis C;>>Measles;>>Herpes simplex virus 1 infection;>>Lipid and atherosclerosis
Gene Name :	EIF2AK3
Protein Name :	Eukaryotic translation initiation factor 2-alpha kinase 3
Human Gene Id :	9451
Human Swiss Prot No :	Q9NZJ5
Mouse Swiss Prot No :	Q9Z2B5
Immunogen :	Purified recombinant fragment of human PERK expressed in E. Coli.
Specificity :	PERK Monoclonal Antibody detects endogenous levels of PERK protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight :	125kD
Cell Pathway :	Alzheimer's disease;
P References :	1. Autophagy. 2008 Apr 1;4(3):364-7. 2. J Biol Chem. 2008 Jun 20;283(25):17020-9. 3. Hum Mol Genet. 2008 Oct 15;17(20):3254-62.
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 malfolded proteins. Mutations in this gene are associated with Wolcott-Rallison syndrome. [provided by RefSeq, Sep 2015],
Function :	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 lumenal 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 act
Subcellular Location :	Endoplasmic reticulum membrane; Single-pass type I membrane protein.
Expression :	Ubiquitous. A high level expression is seen in secretory tissues.
Tag :	orthogonal
Sort :	1121
No4 :	1
Host :	Mouse
Modifications :	Unmodified

Products Images



Western Blot analysis using PERK Monoclonal Antibody against HEK293 (1) and EIF2AK3-hIgGFc transfected HEK293 (2) cell lysate.