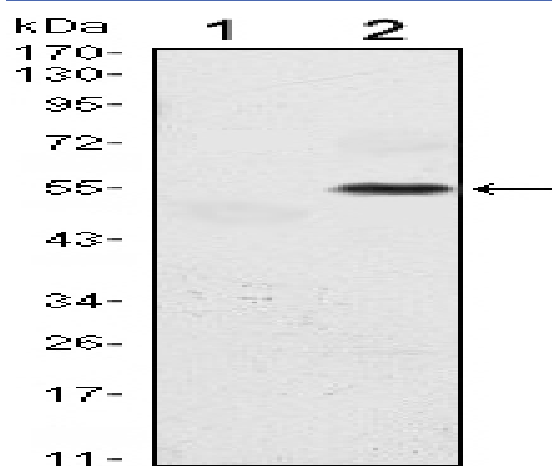


**PERK Monoclonal Antibody**

<b>Catalog No :</b>	YM0517
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	PERK
<b>Fields :</b>	>>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
<b>Gene Name :</b>	EIF2AK3
<b>Protein Name :</b>	Eukaryotic translation initiation factor 2-alpha kinase 3
<b>Human Gene Id :</b>	9451
<b>Human Swiss Prot No :</b>	Q9NZJ5
<b>Mouse Swiss Prot No :</b>	Q9Z2B5
<b>Immunogen :</b>	Purified recombinant fragment of human PERK expressed in E. Coli.
<b>Specificity :</b>	PERK Monoclonal Antibody detects endogenous levels of PERK protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

<b>Molecularweight :</b>	125kD
<b>Cell Pathway :</b>	Alzheimer's disease;
<b>P References :</b>	<ol style="list-style-type: none"><li>1. Autophagy. 2008 Apr 1;4(3):364-7.</li><li>2. J Biol Chem. 2008 Jun 20;283(25):17020-9.</li><li>3. Hum Mol Genet. 2008 Oct 15;17(20):3254-62.</li></ol>
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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 act</p>
<b>Subcellular Location :</b>	Endoplasmic reticulum membrane; Single-pass type I membrane protein.
<b>Expression :</b>	Ubiquitous. A high level expression is seen in secretory tissues.
<b>Tag :</b>	orthogonal
<b>Sort :</b>	1121
<b>No4 :</b>	1
<b>Host :</b>	Mouse
<b>Modifications :</b>	Unmodified

## Products Images



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