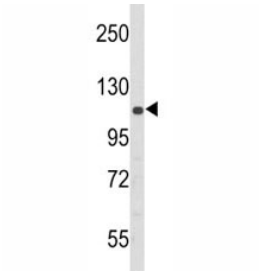
PERK Antibody (F50992)

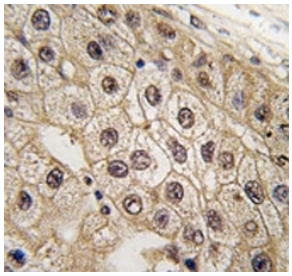
Catalog No.	Formulation	Size
F50992-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50992-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9NZJ5
Localization	Cytoplasmic, ER membrane
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100
Limitations	This PERK antibody is available for research use only.



Western blot analysis of PERK antibody and 293 lysate. Predicted molecular weight ~125 kDa.



IHC analysis of FFPE human hepatocarcinoma tissue stained with PERK antibody

Description

PERK, a member of the GCN2 subfamily of Ser/Thr protein kinases, 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 likely serves as a critical effector of unfolded protein response (UPR)-induced G1 growth arrest due to the loss of cyclin D1 Perturbation in protein folding in the endoplasmic reticulum (ER) promotes reversible dissociation from HSPA5/BIP and oligomerization, resulting in transautophosphorylation and kinase activity induction Expression of this Type I membrane protein is ubiquitous, with highest levels seen in secretory tissues. Defects in EIF2AK3 are the cause of Wolcott-Rallison syndrome (WRS), 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.

Application Notes

Titration of the PERK antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 148-175 from the human protein was used as the immunogen for this PERK antibody.

Storage

Aliquot the PERK antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com