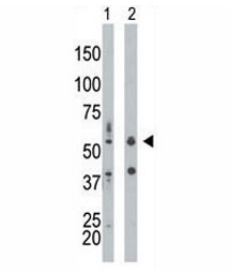
PKR Antibody (F40174)

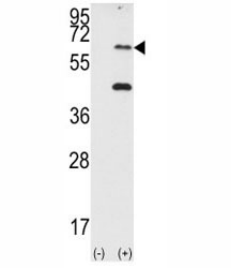
Catalog No.	Formulation	Size
F40174-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40174-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

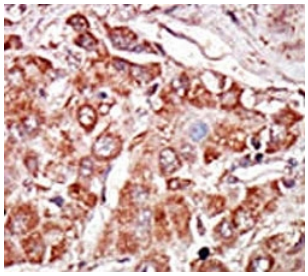
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P19525
Localization	Cytoplasmic
Applications	Western blot: 1:1000 IHC (Paraffin): 1:50-1:100
Limitations	This PKR antibody is available for research use only.



PKR antibody used in western blot to detect PRKR/PKR in mouse liver tissue lysate (Lane 1) and HepG2 cell lysate (2). Predicted molecular weight ~62 kDa but routinely observed at 68-72 kDa.



Western blot analysis of PKR antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the EIF2AK2/PKR gene (2). Predicted molecular weight ~62 kDa but routinely observed at 68-72 kDa.



IHC analysis of FFPE human hepatocarcinoma stained with the PKR antibody

Description

Interferon-induced, double-stranded RNA-activated protein kinase (PRKR/PKR) is a serine-threonine kinase. Activation by dsRNAs leads to autophosphorylation of PKR and allows the kinase to phosphorylate its natural substrate, the alpha subunit of eukaryotic protein synthesis initiation factor-2 (EIF2-alpha), leading to the inhibition of protein synthesis. PRKR, which is involved in TLR signaling and mediates apoptosis in fibroblasts in response to viral infection and inflammatory cytokines, activates IKK and NFKB, thereby suppressing apoptosis. Apoptosis induced by live pathogenic gram-positive and gram-negative bacteria requirs both TLR4 and PKR, possibly representing a major mechanism for pathogenic bacteria that use specific virulence factors to avoid detection and destruction by the innate immune system.

Application Notes

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

Immunogen

A portion of amino acids 11-42 from the human protein was used as the immunogen for this PKR antibody.

Storage

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

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