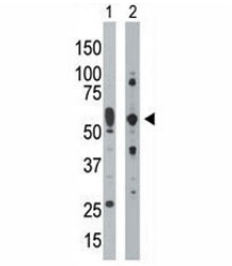
PRKR Antibody (F40175)

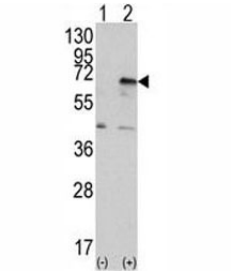
Catalog No.	Formulation	Size
F40175-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40175-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

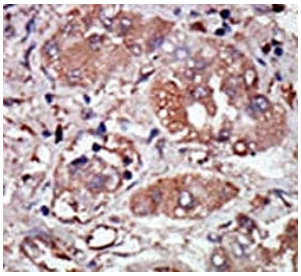
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P19525
Localization	Cytoplasmic
Applications	Western blot: 1:1000 IHC (Paraffin): 1:50-1:100
Limitations	This PRKR antibody is available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



PRKR antibody used in western blot to detect PRKR/PKR in mouse uterus 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 PRKR 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 PRKR antibody

Description

Interferon-induced, double-stranded RNA-activated protein kinase is a serine-threonine kinase. Activation by dsRNAs leads to autophosphorylation of PRKR 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. Human gamma-interferon (IFNG) mRNA exploits localized activation of PRKR in the cell to regulate its own translation. IFNG mRNA activates PRKR through a pseudoknot in its 5-prime untranslated region. The HCV envelope protein E2 contains a sequence identical with phosphorylation sites of the interferon-inducible protein kinase PRKR and the translation initiation factor EIF2-alpha, a target of PRKR. E2 inhibits the kinase activity of PRKR and blocks its inhibitory effect on protein synthesis and cell growth, which provides one mechanism by which HCV may circumvent the antiviral effect of interferon.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the PRKR antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 519-550 from the human protein was used as the immunogen for this PRKR antibody.

Storage

Aliquot the PRKR 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

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