

Product datasheet for **TA306357**

PKR (EIF2AK2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1 - 2 ug/mL, ICC: 5 ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	PKR antibody was raised against a peptide corresponding to 14 amino acids near the amino terminus of human PKR.
Formulation:	PBS containing 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Affinity chromatography purified via peptide column
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	eukaryotic translation initiation factor 2 alpha kinase 2
Database Link:	NP_002750 Entrez Gene 5610 Human P19525



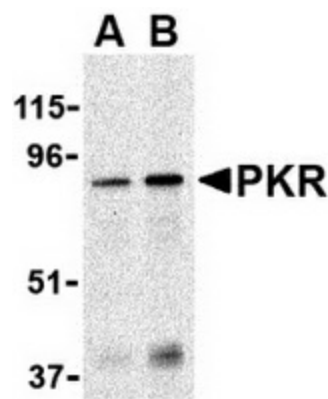
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Background:

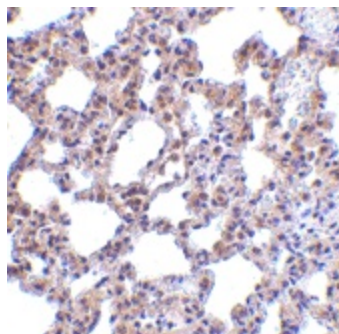
The interferon-inducible, double-stranded RNA (dsRNA)-dependent protein kinase PKR is a member of the eukaryotic initiation factor-2 alpha (eIF2-alpha) kinase family, possessing serine-threonine kinase activity and two dsRNA-binding motifs that acts as part of the innate immune system. Upon binding dsRNA, PKR undergoes a conformational change leading to its activation and its phosphorylation of the translation factor eIF2, resulting in a general shutdown of protein synthesis and induction of apoptosis through upregulation of caspase-8 and capsase-9 activity in order to prevent the production of more viruses. To evade the antiviral effects of PKR, viruses have evolved multiple mechanisms, such as the inhibition of PKR by the non-structural protein (NS1) of the influenza virus. More recently, PKR has been implicated in several neurodegenerative diseases including Alzheimer, Huntington, and amyotrophic lateral sclerosis.

Synonyms:

EIF2AK1; PKR; PPP1R83; PRKR

Product images:


Western blot analysis of PKR in Caco-2 whole cell lysate with PKR antibody at (A) 1 and (B) 2 ug/ml.



Immunohistochemistry of PKR in rat lung tissue with PKR antibody at 5 ug/ml.