



# PRKR, Phospho-threonine [T258] protein kinase interferon-inducible double stranded RNA dependent polyclonal antibody

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### Box 1 | Basic Info

Cat. No.	ABP-PAB-11664
Animal ID	RB0289/RB0290
Host	Rabbit
Reactivity	Human
Format	Affinity-purified
Accession number	NM_002759
Amount	100µg

#### Alternative Name(s):

**PRKR, EIF2AK1, interferon-inducible eIF2α-kinase, protein kinase, interferon-inducible double stranded RNA dependent**

Protein kinase interferon-inducible double stranded RNA dependent (PRKR), a serine/threonine kinase, is activated in virus-infected cells and acts as an antiviral machinery of type I interferons. PRKR plays an important role in mRNA translation by phosphorylating the alpha subunit of eukaryotic initiation factor 2. Through this capacity PRKR is thought to be a mediator of the antiviral and antiproliferative actions of interferon. In addition to translational function, PRKR has been implicated in many signaling pathways to gene transcription by modulating the activities of a number of transcription factors, including NF-kappa B and STATs.

#### Buffers

Purified rabbit polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column and eluted out with both high and low pH buffers and neutralized immediately after elution then followed by dialysis against PBS.

#### Immunogen

KLH conjugated synthetic peptide comprised of amino acids 255 - 266 [TKY[T\*]VDKRF] of the human phospho-threonine [T258] protein kinase interferon-inducible double stranded RNA dependent (PRKR) protein.

#### Application

Tested by peptide-specific ELISA (1:1,000).

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C. Avoid repeated freeze-thaw cycles.

#### References:

1. Scheuner D, Gromeier M, Davies MV, Dorner AJ, Song B, Patel RV, Wimmer EJ, McLendon RE, Kaufman RJ: The double-stranded RNA-activated protein kinase mediates viral-induced encephalitis. *Virology* 317(2): 263-274 (2003).
2. Hiasa Y, Kamegaya Y, Nuriya H, Onji M, Kohara M, Schmidt EV, Chung RT: Protein kinase R is increased and is functional in hepatitis C virus-related hepatocellular carcinoma. *Am. J. Gastroenterol.* 98(11): 2528-2534 (2003).
3. Peel AL, Bredesen DE: Activation of the cell stress kinase PKR in Alzheimer's disease and human amyloid precursor protein transgenic mice. *Neurobiol Dis.* 14(1): 52-62 (2003).
4. Pang Q, Christianson TA, Koretsky T, Carlson H, David L, Keeble W, Faulkner GR, Speckhart A, Bagby GC: Nucleophosmin interacts with and inhibits the catalytic function of eukaryotic initiation factor 2 kinase PKR. *J. Biol. Chem.* 278(43): 41709-41717 (2003).