

**PKR (C-term) Rabbit Monoclonal Antibody  
Product Data Sheet**

**Catalog #1511-1**

**Clone ID:** Y117      **Lot #:** YC081503  
**Quantity:** 100 µl  
**Type:** Rabbit Monoclonal IgG  
**Species Cross-reactivity:**  Human  Mouse  Rat  
**Applications:**  WB  IHC  ICC  Flow Cytometry  IP  
**Molecular Wt.:** 68 kDa  
**UniProt ID:** P19525

**Background:** Protein kinase R (PKR) is a serine/threonine kinase that is induced by interferon and activated by double-stranded RNA. Upon activation, PKR is autophosphorylated at multiple sites and phosphorylates the  $\alpha$ -subunit of the eukaryotic initiation factor-2 eIF2 (eIF2 $\alpha$ ), inhibiting protein synthesis (1,2). PKR controls the activation of several transcription factors (1) and mediates the effects of interferon via its capacity to inhibit protein synthesis (2). It has been shown that the autophosphorylation sites Thr-446 and Thr-451 in the activation loop of Human PKR are critical for its kinase activity (3).

**Specificity:** A synthetic peptide corresponding to residues near C-terminus of human PKR was used as immunogen. The antibody does not cross-react with other GCN2 family members.

**Storage Conditions:** Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

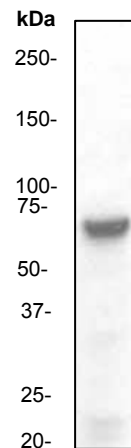
**Recommended Dilutions:**

WB: 1:5,000-10,000  
IHC: 1: 100  
ICC: 1:250-500  
IP: 1:80

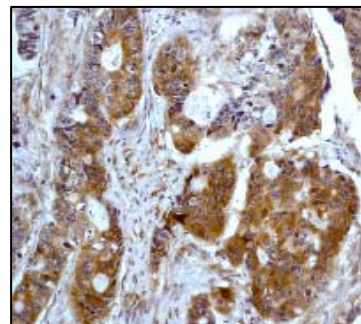
**Background References:**

- Williams, B.R. PKR; a sentinel kinase for cellular stress. *Oncogene* 18: 6112–6120 (1999).
- Cuddihy, A.R., et al. The double-stranded RNA activated protein kinase PKR physically associates with the tumor suppressor p53 protein and phosphorylates human p53 on serine 392 in vitro. *Oncogene* 18: 2690–2702 (1999).
- Zhang, F., et al. Binding of double-stranded RNA to protein kinase PKR is required for dimerization and promotes critical autophosphorylation events in the activation loop. *J. Biol. Chem.* 276: 24946–24958 (2001).

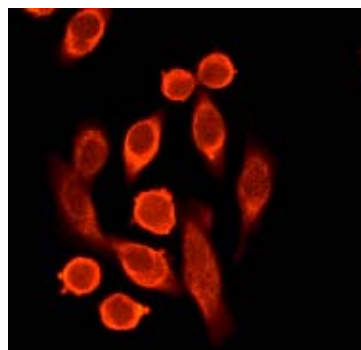
Product QC'd by: \_\_\_\_\_

**Fig 1.** Western blot analysis on MCF-7 cell lysate using anti-PKR (C-term) RabMAb (catalog # 1511-1), 1:10,000 dilution.



**Fig 2.** Immunohistochemical analysis of paraffin-embedded human colon carcinoma using anti-PKR (C-term) RabMAb (catalog #1511-1).



**Fig 3.** Immunofluorescent staining of HeLa cells using anti-PKR (C-term) RabMAb (catalog #1511-1).

**For research use only. Not for use in diagnostic or therapeutic applications.**

*This product was manufactured under US Patents No. 5,675,063 and 5,599,681. For a complete list of protocols and available related products, please visit [www.epitomics.com](http://www.epitomics.com).*