

DESCRIPTION

| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human PKR in Western blots. |
| Source | Monoclonal Mouse IgG ₁ Clone # HL71/10 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | Protein kinase fraction from interferon-treated Daudi human Burkitt's lymphoma cell line. Laurent, A.G. <i>et al.</i> (1985) Proc. Natl. Acad. Sci. 82 :4341. |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

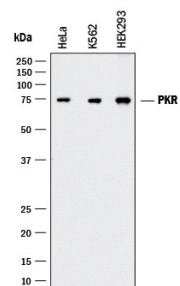
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|----------------------------|--|---------------|
| Western Blot | 1 µg/mL | See Below |
| Immunocytochemistry | 8-25 µg/mL | See Below |
| Simple Western | 10 µg/mL | See Below |
| Immunoprecipitation | Laurent, A.G. <i>et al.</i> (1985) Proc. Natl. Acad. Sci. 82 :4341. | |

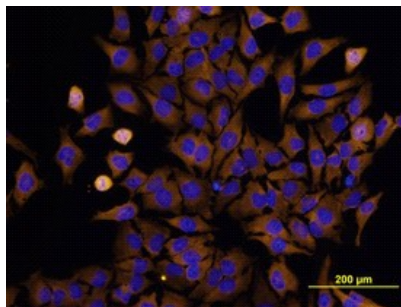
DATA

Western Blot



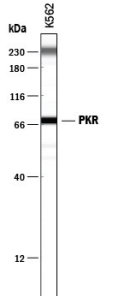
Detection of Human PKR by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, K562 human chronic myelogenous leukemia cell line, and HEK293 human embryonic kidney cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human PKR Monoclonal Antibody (Catalog # MAB1980) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for PKR at approximately 74 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry




PKR in HeLa Human Cell Line. PKR was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line stimulated with rhIFN-alpha (Catalog # 11110-1) using Mouse Anti-Human PKR Monoclonal Antibody (Catalog # MAB1980) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (yellow; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Simple Western



Detection of Human PKR by Simple Western™. Simple Western lane view shows lysates of K562 human chronic myelogenous leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for PKR at approximately 73 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human PKR Monoclonal Antibody (Catalog # MAB1980). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.



PREPARATION AND STORAGE

| | |
|--------------------------------|---|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | <p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

The interferon (IFN)-induced PKR mediates inhibition of protein synthesis through phosphorylation of the alpha subunit of eukaryotic initiation factor 2 (eIF2alpha) and is also involved in the induction of the IFN gene through the activation of the transcription factor NF-κB.

References:

1. Bonnet, M.C. *et al.* (2000) Mol. Cell Biol. **20**:4532.