SANTA CRUZ BIOTECHNOLOGY, INC.

PKR (1-515): sc-4124 WB

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

An interferon-inducible RNA-dependent protein serine/threonine kinase (PKC) has been described. PKR in earlier literature is variously known as DAI, dsJ, PI kinase, p65, p67 or TIK for the mouse kinase; and p68 or p69 for the human kinase. The PKR kinase substrate is the α subunit of protein synthesis initiation factor eIF-2. Phosphorylation of eIF-2α on Serine 51 results in inhibition of translation. Molecular cDNA clones have been isolated from both human and mouse cells. The serine/threonine kinase catalytic domains map to the carboxy terminal half of the protein while the RNA-binding domains are located in the amino terminal region. Three kinds of regulation of PKR enzymatic activity have been described. These include transcriptional regulation in response to interferon, an autoregulatory mechanism controlling PKR expression at the level of translation and post-translational regulation by RNA-mediated autophosphorylation.

REFERENCES

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SOURCE

PKR (1-515) is expressed in *E. coli* as an 84 kDa tagged fusion protein corresponding to amino acids 1-515 representing full length PKR protein of mouse origin.

PRODUCT

PKR (1-515) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 µg purified protein in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

PKR (1-515) is suitable as a Western blotting control for sc-708, sc-1702 and sc-6282.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

For research use only, not for use in diagnostic procedures.