



PKR Positive Control (Full length)

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

PKR/EIF2AK2 Positive Control (Full length)

(Human, recombinant protein expressed in 293T)

Cat# CY-E1184-1

Lot No.

For 200 Assays

(40 units/ μ L x 50 μ L)

Product Description:

Human PKR/EIF2AK2 full length, residues 1-551, containing *N*-terminal His tag was expressed in 293T cells. The Positive Control is designed to use for CycLex PKR/EIF2AK2 Kinase Assay Kit (Cat# CY-1184). The Positive Control should be added to the well at 10 m units/well.

Product Size: Recombinant human PKR/EIF2AK2 full length: 2,000 units/50 μ L

Formulation: The Positive Control is supplied frozen in a buffer containing 20mM Hepes-KOH (pH 7.5), 1% BSA, 1mM EDTA, 1 mM DTT, 50mM NaCl, 0.03% Brij35 and 50% glycerol.

Source: Human PKR/EIF2AK2 containing *N*-terminal His tag, expressed in 293T cells.

Purity: Crude cell extract from 293T cells expressed human PKR/EIF2AK2 full length, residues 1-551, containing *N*-terminal His tag.

Substrates: PKR/EIF2AK2 phosphorylates eIF2 α .

Inhibitors: C16 is known as a selective PKR inhibitor.

Unit Definition: One unit is defined as the amount of kinase required to incorporate 1pmol of phosphate into the eIF2 α per minute at 30°C.

Assay Conditions: Assay PKR Positive Control in a 50 μ L reaction containing 20 mM Hepes KOH (pH 6.5), 0.1 mM EGTA, 10 mM MgCl₂, 10 ng/mL poly I:C, 10 mM DTT, 100 μ M [γ -³²P] ATP (1 μ Ci), and 500 ng of GST-eIF2 α . Start the reaction by adding 10 μ L of the Positive Control, diluted 50-fold in a buffer containing 20 mM Hepes KOH (pH 6.5), 0.1 mM EGTA, 10 mM MgCl₂, 0.03% Brij35. Incubate for 30 minutes at 30°C. Terminate the reaction by spotting to phosphocellulose P81 paper, and then wash 4 times with 75 mM H₃PO₄ for 15 min and rinse P81 paper with ethanol. Dry filters and count in a liquid scintillation counter.

Storage and Stability: Stable for 12 months at -70°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot Positive Control to avoid repeated freezing and thawing.

References:

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Related Products:

- * CycLex PKR/EIF2AK2 Kinase Assay Kit: Cat#CY-1184
- * PKR/EIF2AK2 (Human), Active: Cat#CY-SPP80
- * PKR/EIF2AK2 Positive Control (Full length): Cat#CY-E1184-1
- * Anti-Human PKR/EIF2AK2 Polyclonal Antibody: Cat#CY-P1043

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