



Pyk2 Positive Control
Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

Pyk2 Positive Control

(Human, recombinant protein expressed in Sf9)
Cat# CY-E1081

Lot No.
For 100 Assays
(1 unit / μL x 100 μL)

Product Description:

Catalytic domain of human Pyk2 (Proline-rich Tyrosine Kinase 2), corresponding to 425-679 a.a., containing a N-terminal GST tag and a C-terminal His tag, expressed in recombinant baculovirus infected sf9 cells. Purified by sequentially using GSH agarose and Ni-NTA agarose chromatography. The Pyk2 Positive control is designed to use for CycLex Pyk2 Kinase Assay/Inhibitor Screening Kit (Cat# CY-1081). The Pyk2 Positive Control should be added to the well at 1 unit/well. For instance, diluted positive control 1:10, use 10 μL for 1 assay. Unused Pyk2 Positive Control should be stored at -70°C .

Product Size: Recombinant Pyk2: 100 units/100 μL

Formulation: The Pyk2 Positive Control is supplied frozen in a buffer containing 20mM Hepes-KOH (pH 7.5), 1 % BSA, 1mM EDTA, 2 mM DTT, 50mM NaCl, 0.03 % Brij35 and 50% glycerol.

Source: Human Pyk2 containing N-terminal GST-tag and C-terminal His tag, expressed in sf9 cells.

Molecular Weight: Pyk2 Positive Control demonstrates a single 60 kDa bands by SDS-PAGE analysis.

Purity: Pyk2 Positive Control is greater than 80% pure as determined by SDS-PAGE analysis.

Substrates: Pyk2 phosphorylates poly[Glu, Tyr] 4:1 as a exogenous substrate.

Inhibitors: Selective Pyk2 inhibitor has not been discovered yet.

Unit Definition: One unit is defined as the amount of kinase required to incorporate 1 nmol of phosphate into the Pyk2 (autophosphorylation) under oligomerized-activated condition per 60 minute at 30°C .

Assay Conditions: Assay activity of Met in a 50 μL reaction containing 20 mM Hepes KOH (pH 7.5), 8 mM MgCl_2 , 2 mM MnCl_2 , 1 mM DTT, 50 μM [γ - ^{32}P] ATP (1 μCi), and 4 μg of CycLex-“Tyrosine kinase-binding module”. Start the reaction by adding 10 μL of the enzyme, diluted 10-fold in a buffer containing 20 mM Hepes KOH (pH 7.5), 1 mM DTT, 0.03 % Brij35. Incubate for 60 minutes at 30°C . Terminate the reaction by adding 600 μL of cold 10 % TCA solution containing 0.2 % Sodium pyrophosphate and stand on ice for 15 min. Filtrate acid insoluble material through GFC filters (Whatman Inc.), wash 4 times with 1 % TCA and rinse filters 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 enzyme to avoid repeated freezing and thawing.



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Related Products:

* CycLex Pyk2 Kinase Assay/Inhibitor Screening Kit: Cat# CY-1081

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