



Aurora A Positive Control

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

Aurora A Positive Control

(Human, full length, recombinant enzyme expressed in *E. coli*)
Cat# CY-E1165

Lot No.
For 200 Assays
(0.08 units / μL x 100 μL)

Product Description: Human full length Aurora A, containing a *N*-terminal GST tag, expressed in *E. coli*. Purified by GSH agarose chromatography. The Aurora A Positive control is designed to use for Aurora A Assay/Inhibitor Screening Kit [Cat# CY-1165]. The Aurora A Positive Control should be added to the well at 40 m units/well. For instance, diluted positive control 1:20, use 10 μL for 1 assay. Unused Aurora A Positive control should be stored at -70°C .

Product Size: Full length Aurora A: 8 units/100 μL

Formulation: The Aurora A 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 full length Aurora A, containing *N*-terminal GST tag, expressed in *E. coli*.

Molecular Weight: Aurora A demonstrates a single 70 kDa band by SDS-PAGE analysis.

Purity: Aurora A is greater than 80 % pure as determined by SDS-PAGE analysis.

Substrates: Aurora A phosphorylates a number of substrates, including Histone H3, TPX2 and Cyclin B.

Inhibitors: Specific Aurora A inhibitor has not been discovered yet.

Unit Definitions: One unit is defined as the amount of kinase required to incorporate 1 nmol of phosphate into MBP per minute at 30°C .

Assay Conditions: Assay activity of Aurora A in a 50 μL reaction containing 20 mM Hepes KOH (pH 7.5), 5 mM MgCl_2 , 1 mM DTT, 100 μM [γ - ^{32}P] ATP (1 μCi), and 4 μg of GST-Lats2 N-ter. Start the reaction by adding 10 μL of the enzyme, diluted 50-fold in a buffer containing 20 mM Hepes KOH (pH 7.5), 1 mM DTT, 0.03 % Brij35. Incubate for 30 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:

*Aurora A Assay/Inhibitor Screening Kit: Cat# CY-1165

General References:

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