



Aurora B Positive Control

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

Aurora B Positive Control

(Human, full length, recombinant enzyme expressed in *E. coli*.)

Cat# CY-E1174-1

Lot No.

For 200 Assays

(0.08 units / μL x 100 μL)

Product Description: Human full length Aurora B, containing a *N*-terminal GST-tag, expressed in *E. coli*. Purified by GSH-agarose chromatography. The Aurora B Positive control is designed to use for Aurora Family Assay /Inhibitor Screening Kit-1 [Cat# CY-1174]. The Aurora B 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 B Positive control should be stored at -70°C .

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

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

Source: Human full length Aurora B, containing *N*-terminal GST-tag, expressed in *E. coli*.

Molecular Weight: Aurora B demonstrates a single 64 kDa band by SDS-PAGE analysis.

Purity: Aurora B is greater than 65% pure as determined by SDS-PAGE analysis.

Substrates: Aurora B phosphorylates a number of substrates, including Histone H3, INCENP, CENP-A and Survivin.

Inhibitors: Specific Aurora B inhibitor has not been discovered yet. However ZM447439 was known as a specific inhibitor for Aurora kinase family⁽¹⁰⁾.

Unit Definitions: One unit is defined as the amount of kinase required to incorporate 1 nmol of phosphate into the Histone H3, per minute at 30°C .

Assay Conditions: Assay activity of Aurora B 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 Histone H3. 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 kinase Positive control: Cat# CY-E1165
- * Aurora C kinase Positive control: Cat# CY-E1174-2
- * Aurora-A kinase Assay/Inhibitor Screening Kit: Cat# CY-1165
- * Aurora Family Kinase Assay/Inhibitor Screening Kit: Cat# CY-1174

General References:

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