



Wee1 Positive Control

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

Wee1 Positive Control

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

Cat# CY-E1172

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

Product Description: Human full length Wee1, containing a *N*-terminal GST-tag, expressed in *E. coli*. Purified by GSH-agarose chromatography. The Wee1 Positive control is designed to use for CycLex Wee1 Kinase Assay/Inhibitor Screening Kit [Cat# CY-1172]. The Wee1 Positive Control should be added to the well at 40 m units/well. For instance, diluted positive control 1:10, use 10 μL for 1 assay. Unused Wee1 Positive control should be stored at -70°C .

Product Size: Full length Wee1: 8 units/200 μL

Formulation: The Wee1 Positive Control is supplied frozen in a buffer containing 20mM HEPES-KOH (pH 7.5), 1 mM DTT, 50mM NaCl and 50% glycerol.

Source: Human full length Wee1, containing *N*-terminal GST-tag, expressed in *E. coli*.

Molecular Weight: Wee1 demonstrates a single 76kDa band by SDS-PAGE analysis.

Purity: Wee1 is greater than 70% pure as determined by SDS-PAGE analysis.

Substrates: Wee1 phosphorylates Cdc2 exclusively on Y15, not T14.

Inhibitors: Specific Wee1 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 the GST-Cdc2, per minute at 30°C .

Assay Conditions: Assay activity of Wee1 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-Cdc2. Start the reaction by adding 10 μL of the enzyme, diluted 50-fold in a buffer containing 20 mM Hepes KOH (pH 7.5), 8mM 2-Mercaptoethanol. 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.

Related Products:

* Wee1 Kinase Assay/Inhibitor Screening Kit: Cat# CY-1172



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General References:

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