abcam

Product datasheet

Recombinant human Weel protein (Tagged) ab271795

2 Images

Description

Product name Recombinant human Wee1 protein (Tagged)

Biological activity Specific Activity: ≥42 pmol/min/µg

Assay Conditions: Assay was done in Kinase buffer containing 1 mM DTT using Poly-(Lys4:Tyr) substrate (0.2 mg/ml) and 20 μ M ATP. Reaction was done at 30°C for 45 min. Amount of ATP

transferred was calculated using Kinase-Glo reagent.

Purity >= 75 % SDS-PAGE.

Affinity purified.

Expression system Baculovirus infected Sf9 cells

Accession P30291

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence DTEKSGKRE FDVRQTPQVN INPFTPDSLL

LHSSGQCRRR KRTYWNDSCG EDMEASDYEL

EDETRPAKRI TITESNMKSR YTTEFHELEK IGSGEFGSVF

KCVKRLDGCI YAIKRSKKPL AGSVDEQNAL REVYAHAVLG QHSHVVRYFS AWAEDDHMLI QNEYCNGGSL ADAISENYRI MSYFKEAELK

DLLLQVGRGL RYIHSMSLVH MDIKPSNIFI SRTSIPNAAS

EEGDEDDWAS NKVMFKIGDL GHVTRISSPQ VEEGDSRFLA NEVLQENYTH LPKADIFALA LTVVCAAGAE PLPRNGDQWH EIRQGRLPRI PQVLSQEFTE LLKVMIHPDP ERRPSAMALV KHSVLLSASR KSAEQLRIEL NAEKFKNSLL QKELKKAQMA KAAAEERALF TDRMATRSTT

QSNRTSRLIG KKMNRSVSLT IY

Predicted molecular weight 75 kDa including tags

Amino acids 215 to 646

Tags GST tag N-Terminus

Additional sequence information N-terminal GST-Thrombin-Tag

Specifications

Our **Abpromise guarantee** covers the use of **ab271795** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Functional Studies

Form Liquid

Preparation and Storage

Stability and Storage Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.

00.8 :Ha

Constituents: 0.63% Tris HCI, 0.64% Sodium chloride, 0.02% Potassium chloride, 0.04% Tween,

20% Glycerol (glycerin, glycerine), 0.06% Glutathione

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function Acts as a negative regulator of entry into mitosis (G2 to M transition) by protecting the nucleus

from cytoplasmically activated cyclin B1-complexed CDK1 before the onset of mitosis by

mediating phosphorylation of CDK1 on 'Tyr-15'. Specifically phosphorylates and inactivates cyclin B1-complexed CDK1 reaching a maximum during G2 phase and a minimum as cells enter M phase. Phosphorylation of cyclin B1-CDK1 occurs exclusively on 'Tyr-15' and phosphorylation of

monomeric CDK1 does not occur. Its activity increases during S and G2 phases and decreases at M phase when it is hyperphosphorylated. A correlated decrease in protein level occurs at M/G1

phase, probably due to its degradation.

Sequence similarities Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. WEE1 subfamily.

Contains 1 protein kinase domain.

Post-translational

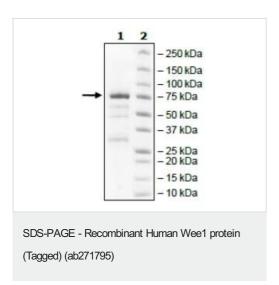
Phosphorylated during M and G1 phases. Also autophosphorylated.

modifications

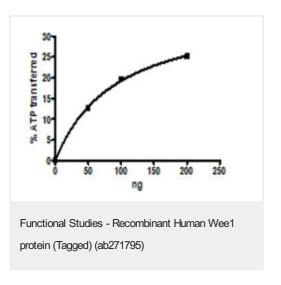
Ubiquitinated and degraded at the onset of G2/M phase.

Cellular localization Nucleus.

Images



SDS-PAGE analysis of ab271795.



Specific activity of ab271795 was ≥42 pmol/min/µg.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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