

PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



p-Chk1 (S345) Peptide

Cat No.: BS4041P

Background

Cell cycle events are regulated by the sequential activation and deactivation of cyclin dependent kinases (Cdks) and by proteolysis of cyclins. Chk1 and Chk2 are involved in these processes as regulators of Cdks. Chk1 and Chk2 both function as essential components in the G2 DNA damage checkpoint by phosphorylating Cdc25C in response to DNA damage. Phosphorylation inhibits Cdc25C activity, thereby blocking mitosis. Cdc25A, Cdc25B and Cdc25C protein tyrosine phosphatases function as mitotic activators by dephosphorylating Cdc2 p34 on regulatory tyrosine residues. It has also been shown that Chk1 can phosphorylate Wee 1 in vitro, providing evidence that the hyperphosphorylated form of Wee 1, seen in cells delayed by Chk1 overexpression, is due to phosphorylation by Chk1. Chk1 is phosphorylated on Serine 345 (S345) in response to UV, IR and hydroxyurea (HU). Chk1 plays an essential role in the mammalian DNA damage checkpoint, embryonic development and tumor suppression.

Swiss-Prot

O14757

Applications

Blocking

Specificity

This peptide can be used with studies using BS4041 p-Chk1 (S345) pAb.

Purification & Purity

Synthetic peptide p-Chk1 (S345). (Note: the amino acid sequence is proprietary). The purity is > 98%.

Product

1 mg/ml in DI water.

Storage & Stability

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Research Use

For research use only, not for use in diagnostic procedure.