

## Chk1 (phospho-S280) polyclonal antibody

Catalog: BS4039

Host: Rabbit

Reactivity: Human, Mouse, Rat

### 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

### Product:

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2.

### Molecular Weight:

~ 56 kDa

### Swiss-Prot:

O14757

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:500~1:1000

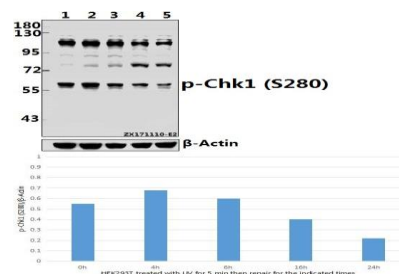
### Storage&Stability:

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

### Specificity:

p-Chk1 (S280) polyclonal antibody detects endogenous levels of Chk1 protein when phosphorylated at Ser280.

### DATA:



Western blot (WB) analysis of Chk1 (phospho-S280) polyclonal antibody at 1:500 dilution

Lane1:HEK293T whole cell lysate(40ug)

Lane2:HEK293T treated with UV for 5 minutes then repair for 4 hours whole cell lysate(40ug)

Lane3:HEK293T treated with UV for 5 minutes then repair for 6 hours whole cell lysate(40ug)

Lane4:HEK293T treated with UV for 5 minutes then repair for 16 hours whole cell lysate(40ug)

Lane5:HEK293T treated with UV for 5 minutes then repair for 24 hours whole cell lysate(40ug)

### Note:

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

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