# PRODUCT DATA SHEET



# **Bioworld Technology CO., Ltd.**

# p-p53 (S33) Peptide

Cat No.: BS4146P

# **Background**

p53 plays a major role in the cellular response to DNA damage and other genomic aberrations. The activation of p53 can lead to either cell cycle arrest and DNA repair, or apoptosis. p53 is phosphorylated at multiple sites in vivo and by several different protein kinases in vitro. p53 can apparently be phosphorylated by ATM, ATR, and DNAPK at Ser15; the phosphorylation impairs the ability of MDM2 to bind p53, promoting both the accumulation and functional activation of p53 in response to DNA damage. Chk2 and Chk1 can phosphorylate p53 at Ser20, enhancing its tetramerization, stability and activity. p53 is phosphorylated at Ser6 and Ser9 by ck1d and ck1e both in vitro and in vivo. Phosphorylation of p53 at Ser46 is important in regulating the ability of p53 to induce apoptosis. In vivo phosphorylation of p53 at Ser33 by cdk7/cyclin H and in response to UV irradiation has been observed.

#### **Swiss-Prot**

P04637

# **Applications**

**Blocking** 

#### **Specificity**

This peptide can be used with studies using BS4146 p-p53 (S33) pAb.

# **Purification & Purity**

Synthetic peptide p-p53 (S33). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### **Product**

1 mg/ml in DI water.

### **Storage & Stability**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

#### **Research Use**

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