PRODUCT DATA SHEET



Bioworld Technology CO., Ltd.

p-Vimentin (S56) Peptide

Cat No.: BS4883P

Background

Phosphorylation of Vimentin induces disassembly of Vimentin intermediate filaments in vivo and in vitro. Binding of 14-3-3 depends on Vimentin phosphorylation and requires the phosphopeptide binding domain of 14-3-3, which is an amino terminal head domain consisting of amino acids 1-96. Phosphorylated Vimentin sequesters 14-3-3 and limits its availability to other target proteins, which can affect intracellular signaling processes that require 14-3-3. The amino-terminal domain of Vimentin is the target site for several protein kinases, including Rho kinase and PKC. Ser 38 and Ser 71 of Vimentin are the major sites of phosphorylation by Rho kinase. The disruption of subcellular compartmentalization of interphase cells leads to PKC-mediated phosphorylation of Vimentin. Thus, targeting of activated PKC, coupled with the reorganization of intracellular membranes, which contain phospholipids essential for activation, leads to the mitosis-specific phosphorylation of Vimentin.

Swiss-Prot

P08670

Applications

Blocking

Specificity

This peptide can be used with studies using BS4883 p-Vimentin (S56) pAb.

Purification & Purity

Synthetic peptide p-Vimentin (S56). (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 C long term. Avoid freeze-thaw cycles.

Research Use

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