

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# Vimentin (phospho-S56) polyclonal antibody

Catalog: BS4883 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **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.

#### **Product:**

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

# **Molecular Weight:**

~ 40, 57 kDa

#### **Swiss-Prot:**

P08670

# **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 IHC: 1:50~1:200

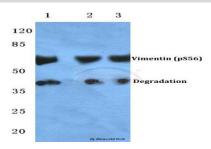
#### **Storage&Stability:**

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

# **Specificity:**

p-Vimentin (S56) polyclonal antibody detects endogenous levels of Vimentin protein when phosphorylated at Ser56.

#### **DATA:**

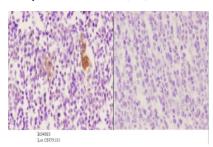


Western blot (WB) analysis of p-Vimentin (S56) polyclonal antibody at 1:500 dilution

Lane1:MCF-7 cell lysate treated with UV(24h)

Lane2:NIH-3T3 cell lysate treated with UV(24h)

Lane3:H9C2 cell lysate treated with UV(24h)



Immunohistochemistry (IHC) analyzes of p-Vimentin (S56) pAb in paraffin-embedded human tonsil carcinoma tissue at 1:50.showing cytoplasmic and nucleus staining. Negative control (the right)Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG-biotin followed by avidin-peroxidase.

#### Note:

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

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