

## PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



### p-PLC $\gamma$ 1 (Y783) Peptide

Cat No.: BS4157P

#### Background

Phosphoinositide-specific phospholipase C (PLC) plays a crucial role in the initiation of receptor mediated signal transduction through the generation of the two second messengers, inositol 1,4,5-triphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. There are many mammalian PLC isozymes, including PLC  $\beta$ 1, PLC  $\beta$ 2, PLC  $\beta$ 3, PLC  $\beta$ 4, PLC  $\gamma$ 1, PLC  $\gamma$ 2, PLC  $\delta$ 1, PLC  $\delta$ 2 and PLC  $\epsilon$ . PLC  $\gamma$ 1 is widely distributed in bronchiolar epithelium, type I and II pneumocytes and fibroblasts of the interstitial tissue. Actinregulatory protein Villin is tyrosine phosphorylated and associates with PLC  $\gamma$ 1 in the brush border of intestinal epithelial cells. Villin regulates PLC  $\gamma$ 1 activity by modifying its own ability to bind phosphatidylinositol 4,5-bisphosphate. PLC  $\gamma$ 1 binds  $\alpha$ 1 $\beta$ 1 Integrin and modulates  $\alpha$ 1 $\beta$ 1 Integrin-specific adhesion. PLC  $\gamma$ 1 and Ca<sup>2+</sup> play a direct role in VEGF-regulated endothelial growth, however this signaling pathway is not linked to FGF-mediated effects in primary endothelial cells.

#### Swiss-Prot

P19174

#### Applications

Blocking

#### Specificity

This peptide can be used with studies using BS4157 p-PLC  $\gamma$ 1 (Y783) pAb.

#### Purification & Purity

Synthetic peptide p-PLC  $\gamma$ 1 (Y783). (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.