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



# IP3KA (H431) Peptide

Cat No.: BS1959P

### Background

Inositol 1,4,5-trisphosphate (Ins(1,4,5)P3) regulates the level of calcium within the cell by releasing calcium from intracellular stores. Ins(1,4,5)P3 is phosphorylated by inositol 1,4,5-trisphosphate 3-kinase (IP3K) to form inositol 1,3,4,5-tetrakisphosphate (Ins(1,4,5)P4), which is is thought to regulate the influx of calcium across the plasma membrane. IP3K exists as three isoforms, IP3KA, B, and C. IP3KA, the most highly characterized isoform, is approximately 51 kDa and is expressed in rat brain and testis. IP3KB has a molecular weight of 74 kDa and is expressed in various rat tissues such as lung, thymus, testis, brain, and heart. IP3K activity is stimulated in the presence of calmodulin via phosphorylation by cAMP-dependent protein kinase, protein kinase C, or calcium/calmodulin dependent protein kinase II and, subsequently, mediates the inositol phosphate signaling pathways.

**Swiss-Prot** 

P23677

Applications

#### Blocking

#### **Specificity**

This peptide can be used with studies using BS1959 IP3KA (H431) pAb.

## **Purification & Purity**

Synthetic peptide IP3KA (H431). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### Product

1 mg/ml in DI water.

**Storage & Stability** 

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

#### **Research Use**

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