## PRODUCT DATA SHEET



# Bioworld Technology CO., Ltd.

# Na+ CP type IVα Peptide

Cat No.: BS5812P

## **Background**

Voltage-gated sodium channels are selective ion channels that regulate the permeability of sodium ions in excitable cells. During the propagation of an action potential, sodium channels allow an influx of sodium ions, which rapidly depolarize the cell. The three glycoproteins that comprise the voltagegated sodium channel proteins include a pore-forming α subunit, a noncovalently associated \$1 subunit and a disulfide-linked \$2 subunit. The two  $\beta$  subunits regulate the level of channel expression, modulate gating and function as cell adhesion molecules for cellular aggregation and cytoskeleton interaction. The  $\alpha$  subunits of sodium channels type I and III are predominantly expressed in neuronal cell bodies and proximal processes, while type IIa subunits are more abundant along axons. The β1 subunit of sodium channel type I is expressed in brain, skeletal and cardiac muscle. In the brain, β1 and β2 are highly expressed in Purkinje cells, and \beta 1 is also expressed in the pyramidal cells of the deep cerebellar nuclei. Impaired voltage-gated sodium channels lead to a number of diseases including myotonia.

# **Swiss-Prot**

P35499

# **Applications**

**Blocking** 

#### **Specificity**

This peptide can be used with studies using BS5812 Na+ CP type IV $\alpha$  pAb.

# **Purification & Purity**

Synthetic peptide Na+ CP type IV $\alpha$ . (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.