

## PRODUCT DATA SHEET



Bioworld Technology, Inc.

### Na<sup>+</sup> CP type II $\alpha$ (K1032) pAb

Cat No.: BS3562

Host: Rabbit

Reactivity: Human, Mouse, Rat

#### 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 voltage-gated sodium channel proteins include a pore-forming  $\alpha$  subunit, a noncovalently associated  $\beta 1$  subunit and a disulfide-linked  $\beta 2$  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 II $\alpha$  subunits are more abundant along axons. The  $\beta 1$  subunit of sodium channel type I is expressed in brain, skeletal and cardiac muscle. In the brain,  $\beta 1$  and  $\beta 2$  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.

#### PRODUCT

1 mg/ml in Phosphate buffered saline (PBS) with 0.05

#### 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

IHC: 1:50 ~ 1:200 (Recommended Dilutions)

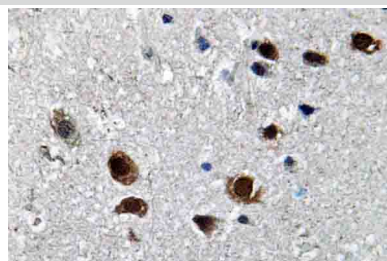
#### STORAGE & STABILITY

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

#### SPECIFICITY

Na<sup>+</sup> CP type II $\alpha$  (K1032) pAb detects endogenous levels of Na<sup>+</sup> CP type II $\alpha$  protein.

#### DATA



**Immunohistochemistry (IHC)** analyzes of Na<sup>+</sup> CP type II $\alpha$  (K1032) pAb in paraffin-embedded human brain tissue.

#### RESEARCH USE

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

Bioworld Technology, Inc.

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