

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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### Kv3.1b Potassium Channel. Rabbit Polyclonal Antibody

#### BACKGROUND

The Kv3.1b potassium channel is a voltage-gated channel protein which belongs to the delayed rectifier class and to the Shaw potassium channel subfamily. Potassium channels are mainly found in plasma membranes but are not generally distributed over the cell surface. Potassium channels catalyze the rapid permeation of potassium ions while rejecting biologically abundant potential competitors such as sodium, calcium and magnesium. Ion selectivity and high through put rate of potassium channels is accomplished by precise co-ordination of dehydrated potassium by the protein and multiple ion occupancy within the permeation pathway. All potassium channels carry out the formation of a transmembrane leak specific for potassium ions. Since cells almost universally maintain cytoplasmic potassium concentrations higher than those extracellularly, the opening of a potassium channel implies a negative ongoing change in electrical voltage across the cell membrane. This may result in termination of the action potential of electrically excitable cells including nerve, muscle and pancreatic beta cells. In non-excitable cells, potassium channels play important roles in the cellular potassium recycling required for electrolyte balance effected by the renal epithelium.

#### **ORDERING INFORMATION**

CATALOG NUMBER

X1504P

SIZE

100 μg

FORM

Unconjugated

HOST/CLONE

Rabbit

**FORMULATION** 

Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION

See vial for concentration

ISOTYPE

lgG

**APPLICATIONS** 

Western Blot

SPECIES REACTIVITY

Human, Mouse, Rat

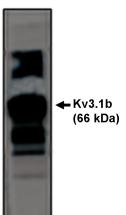
ACCESSION NUMBER

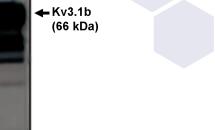
Rat P25122

#### **I**MMUNOGEN

Synthetic peptide derived from the rat Kv3.1b potassium channel conjugated to KLH

Western blot analysis using Kv3.1b antibody on rat brain lysate.





#### Positive Control/Tissue Expression

Rat brain lysate

#### **COMMENTS**

This antibody can be used for Western blotting (5-10  $\mu$ g/ml). Optimal concentration should be evaluated by serial dilutions.

#### **PURIFICATION**

Ammonium Sulfate Precipitation

#### SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

#### STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

#### **STABILITY**

Products are stable for one year from purchase when stored properly

#### REFERENCES

- 1. Luneau, C. Jet.al. 'Alternative splicing contributes to K+ channel diversity in the mammalian central nervous system.' Proc. Natl. Acad. Sci. U.S.A. 88 (9), 3932-3936 (1991)
- 2. Rettig, J et.al 'Characterization of a Shaw-related potassium channel family in ratbrain' EMBO J. 11 (7), 2473-2486 (1992)
- **3.** Hartig, W.et.al 'Perineuronal nets in the rat medial nucleus of the trapezoid body surround neurons immunoreactive for various amino acids, calcium-binding proteins and the potassium channel subunit Kv3.1b.' Brain Res. 899(1-2):123-33 (2001)
- 4. Osipenko, OH et.al Potential role for kv3.1b channels as oxygen sensors. Circ Res.;86(5):534-40 (2000)

PRODUCT SPECIFIC REFERENCES