



# SZABO SCANDIC

Part of Europa Biosite

## 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

### SZABO-SCANDIC HandelsgmbH

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**Kv1.5 Potassium Channel. Rabbit Polyclonal Antibody**  
Voltage-Gated Potassium Channel, Kv1.5 isoform

**BACKGROUND**

The Kv1.5 potassium channel is a voltage-gated channel protein which belongs to the delayed rectifier class and to the Shaker potassium channel subfamily which includes Kv1.1, Kv1.2, Kv1.3 and Kv1.4. 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-excitabile cells, potassium channels play important roles in the cellular potassium recycling required for electrolyte balance effected by the renal epithelium.

**IMMUNOGEN**

Synthetic peptide derived from the rat Kv1.5 potassium channel conjugated to KLH

Western blot analysis using Kv1.5 antibody on rat brain lysate.



← Kv1.5  
(66.5 kDa)

**ORDERING INFORMATION**

**CATALOG NUMBER**  
X1501P

**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**  
IgG

**APPLICATIONS**  
Western Blot

**SPECIES REACTIVITY**  
Human, Mouse, Rat

**ACCESSION NUMBER**

Human	P22460
Mouse	Q61762
Rat	P19024

**POSITIVE CONTROL/TISSUE EXPRESSION**

Rat brain lysate

**COMMENTS**

This antibody can be used for Western blotting (5-10  $\mu\text{g/ml}$ ). 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  $-20^{\circ}\text{C}$ . Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**

1. Swanson, R et.al 'Cloning and expression of cDNA and genomic clones encoding three delayed rectifier potassium channels in rat brain' *Neuron* 4 (6), 929-939 (1990)
2. Roberds, S.L. et.al 'Cloning and tissue-specific expression of five voltage-gated potassium channel cDNAs expressed in rat heart' *Proc. Natl. Acad. Sci. U.S.A.* 88 (5), 1798-1802 (1991)
3. Mori, Y et.al 'The transcription of a mammalian voltage-gated potassium channel is regulated by cAMP in a cell-specific manner' *J. Biol. Chem.* 268 (35), 26482-26493 (1993)
4. Li, H. et.al., 'Functional expression of a GFP-tagged Kv1.5 alpha-subunit in mouse ventricle.' *Am J Physiol Heart Circ Physiol.* 281(5):H1955-67 (2001)

**PRODUCT SPECIFIC REFERENCES**