# SY SY Synaptic Systems

Rudolf-Wissell-Str. 28 37079 Göttingen, Germany Phone: +49 551-50556-0 Fax: +49 551-50556-384 E-mail: sales@sysy.com Web: www.sysy.com

## Kv2.2

Cat.No. 231-1P; control peptide, 100 µg peptide (lyophilized)

### **Data Sheet**

Reconstitution/ Storage	100 μg peptide, lyophilized. For reconstitution add 100 μl H₂O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 859 to 873 from rat Kv2.2 (UniProt Id: Q63099)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	231 103
Remarks	This control protein consists of the synthetic peptide (aa 859-873 of mouse Kv 2.2) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

#### TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Voltage-gated potassium (Kv) channels regulate many aspects of neuronal excitability like shaping of action potentials or modulating of spike patterns.

Mammalian neurons express more than 20 different Kv subunits that can be subdivided into 12 families. Heteromeric assembly of four subunits and differential phosphorylation of Kv channels give rise to a huge molecular and functional diversity.

The Kv 2 subfamily comprising **Kv 2.1** (DRK 1, Kcnb 1) and **Kv 2.2** (CDRK, Kcnb 2) is a unique exception since they do not form heterodimers. Kv 2.1 is found in large clusters on the soma and proximal dendrites of pyramidal neurons.

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