

Kv2.1

Cat.No. 231-0P; control protein, 100 µg protein (lyophilized)

Data Sheet

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|----------------------------|---|
| Reconstitution/ Storage | 100 µg protein, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use. |
| Immunogen | Recombinant protein corresponding to AA 532 to 857 from rat Kv2.1 (UniProt Id: P15387) |
| Recommended dilution | Optimal concentrations should be determined by the end-user. |
| matching antibodies | 231 002 |
| Remarks | This control protein consists of the recombinant mouse Kv 2.1 (aa 532 - 857) 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 protein 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, Kcnc 1) and **Kv 2.2** (CDRK, Kcnc 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.

Selected General References

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