

Kv7.4 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51823

Specification

Kv7.4 Antibody - Product Information

Application	WB, E
Primary Accession	P56696
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	77 KDa

Kv7.4 Antibody - Additional Information

Gene ID 9132

Other Names

Potassium voltage-gated channel subfamily KQT member 4, KQT-like 4, Potassium channel subunit alpha KvLQT4, Voltage-gated potassium channel subunit Kv74, KCNQ4

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Kv7.4 Antibody - Protein Information

Name KCNQ4

Function

Probably important in the regulation of neuronal excitability. May underlie a potassium current involved in regulating the excitability of sensory cells of the cochlea. KCNQ4 channels are blocked by linopirdin, XE991 and bepridil, whereas clofilium is without significant effect. Muscarinic agonist oxotremorine-M strongly suppress KCNQ4 current in CHO cells in which cloned KCNQ4 channels were coexpressed with M1 muscarinic receptors.

Cellular Location

Basal cell membrane; Multi-pass membrane protein. Note=Situated at the basal membrane of cochlear outer hair cells

Tissue Location

Expressed in the outer, but not the inner, sensory hair cells of the cochlea. Slightly expressed in heart, brain and skeletal muscle

Kv7.4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Kv7.4 Antibody - Images

Kv7.4 Antibody - Background

Probably important in the regulation of neuronal excitability. May underlie a potassium current involved in regulating the excitability of sensory cells of the cochlea. KCNQ4 channels are blocked by linopirdin, XE991 and bepridil, whereas clofilium is without significant effect. Muscarinic agonist oxotremorine-M strongly suppress KCNQ4 current in CHO cells in which cloned KCNQ4 channels were coexpressed with M1 muscarinic receptors.

Kv7.4 Antibody - References

Kubisch C., et al. Cell 96:437-446(1999).
Gregory S.G., et al. Nature 441:315-321(2006).
Selyanko A.A., et al. J. Physiol. (Lond.) 522:349-355(2000).
Soegaard R., et al. Am. J. Physiol. 280:C859-C866(2001).
Howard R.J., et al. Neuron 53:663-675(2007).