

# KCNQ3 Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF2930a

## **Specification**

# KCNQ3 Antibody (C-Term) - Product Information

Application

Primary Accession <u>043525</u>

Other Accession NP\_004510.1, 3786, 110862 (mouse), 29682

<u>(rat)</u>

Predicted Human, Mouse, Rat, Pig

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG

Calculated MW 96742

# KCNQ3 Antibody (C-Term) - Additional Information

# **Gene ID 3786**

### **Other Names**

Potassium voltage-gated channel subfamily KQT member 3, KQT-like 3, Potassium channel subunit alpha KvLQT3, Voltage-gated potassium channel subunit Kv7.3, KCNQ3

#### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

KCNQ3 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### KCNQ3 Antibody (C-Term) - Protein Information

# Name KCNQ3 (HGNC:6297)

# **Function**

Associates with KCNQ2 or KCNQ5 to form a potassium channel with essentially identical properties to the channel underlying the native M-current, a slowly activating and deactivating potassium conductance which plays a critical role in determining the subthreshold electrical excitability of neurons as well as the responsiveness to synaptic inputs. Therefore, it is important in the regulation of neuronal excitability. KCNQ2-KCNQ3 channel is selectively permeable to other cations besides potassium, in decreasing order of affinity K(+) > Rb(+) > Cs(+) > Na(+).





Associates with Na(+)-coupled myo-inositol symporter SLC5A3 forming a coregulatory complex that alters ion selectivity, increasing Na(+) and Cs(+) permeation relative to K(+) permeation (PubMed:<a href="http://www.uniprot.org/citations/28793216" target="blank">28793216</a>).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein

### **Tissue Location**

Predominantly expressed in brain.

# KCNQ3 Antibody (C-Term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# KCNQ3 Antibody (C-Term) - Images

## KCNQ3 Antibody (C-Term) - References

Regulation of the voltage-gated K(+) channels KCNQ2/3 and KCNQ3/5 by ubiquitination. Novel role for Nedd4-2. Ekberg J, Schuetz F, Boase NA, Conroy SJ, Manning J, Kumar S, Poronnik P, Adams DJ. J Biol Chem. 2007 Apr 20;282(16):12135-42. PMID: 17322297