Rabbit anti-Human, Mouse KCNQ4 Polyclonal Antibody | anti-KCNQ4 antibody

KCNQ4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA324978	**Rabbit**	**Human, Mouse**	**ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot**

PRODUCT SYNONYMS

KCNQ4; Polyclonal Antibody; KCNQ4 Antibody; DFNA 2; DFNA2; KCNQ 4; Kcnq4; KCNQ4_HUMAN; KQT like 4; KQT-like 4; KV7.4; Potassium channel KQT like 4; Potassium channel subunit alpha KvLQT4; Potassium voltage gated channel KQT like protein 4; Potassium voltage gated channel KQT like subfamily member 4; Potassium voltage gated channel subfamily KQT member 4; Potassium voltage-gated channel subfamily KQT member 4; Voltage gated potassium channel subunit Kv7.4; Voltage-gated potassium channel subunit Kv7.4; anti-KCNQ4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	KCNQ4 antibody detects endogenous levels of total KCNQ4
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	695
Applicable Applications for anti-KCNQ4 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Basal Cell Membrane. Situated at the basal membrane of cochlear outer hair cells.
Tissue Specificity	Expressed in the outer, but not the inner, sensory hair cells of the cochlea. Slightly expressed in heart, brain and skeletal muscle.
Predicted Cross Reactivity	**Pig, Bovine, Horse, Sheep, Rabbit, Dog**
Similarity	Pig (82%), Bovine (91%), Horse (100%), Sheep (91%), Rabbit (91%), Dog (91%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES

WB (Western Blot)
Western blot analysis of extracts from HuvEc cells, using KCNQ4 antibody.The lane on the left is treated with the antigen-specific peptide.

IF (Immunofluorescence)
AAA324978 staining HuvEc by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

IHC (Immunohistochemistry)
AAA324978 at 1/100 staining Human liver cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-KCNQ4 antibody	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. Subunit Structure: Homotetramer. May form heteromultimers with KCNQ3. Interacts with HSP90AB1; promotes cell surface expression of KCNQ4 (PubMed:23431407). Similarity: The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.The A-domain tail carries the major determinants of channel assembly specificity. Its coiled-coil region is Four-stranded. Belongs to the potassium channel family. KQT (TC 1.A.1.15) subfamily. Kv7.4/KCNQ4 sub-subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	26638653
NCBI GeneID	9132
NCBI Accession #	NP_004691.2
NCBI GenBank Nucleotide #	NM_004700.3
UniProt Accession #	P56696; O96025
Molecular Weight	Observed: 80 kD Predicted: 78 kDa
NCBI Official Full Name	potassium voltage-gated channel subfamily KQT member 4 isoform a
NCBI Official Synonym Full Names	potassium voltage-gated channel subfamily Q member 4
NCBI Official Symbol	KCNQ4
NCBI Official Synonym Symbols	DFNA2; KV7.4; DFNA2A
NCBI Protein Information	potassium voltage-gated channel subfamily KQT member 4
UniProt Protein Name	Potassium voltage-gated channel subfamily KQT member 4
UniProt Gene Name	**KCNQ4**

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://stage.aaabiotech.com/polyclonal/kcnq4-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/324978