

Rabbit KCNH2 Polyclonal Antibody | anti-KCNH2 antibody

Phospho-KCNH2 (Ser1137) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328243	Rabbit	Human, Mouse, RatPredicted: Bovine, Horse, Rabbit, Dog	ELISA, Immunohistochemistry, Western Blot

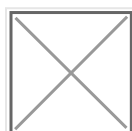
PRODUCT SYNONYMS

KCNH2; Polyclonal Antibody; Phospho-KCNH2 (Ser1137) Antibody; eag homolog; Eag-related protein 1; ERG; ERG-1; ERG1; Ether a go go related potassium channel protein; Ether-a-go-go-related gene potassium channel 1; Ether-a-go-go-related protein 1; H ERG; H-ERG; HERG 1; HERG; hERG-1; hERG1; KCNH2_HUMAN; Kv11.1; LQT 2; LQT2; Potassium channel HERG; Potassium voltage gated channel subfamily H (eag related) member 2; Potassium voltage-gated channel subfamily H member 2; SQT1; Voltage gated potassium channel; subfamily H; member 2; Voltage-gated potassium channel subunit Kv11.1; anti-KCNH2 antibody

PRODUCT SPECIFICATIONS

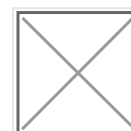
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Bovine, Horse, Rabbit, Dog
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-KCNH2(Ser1137) Antibody detects endogenous levels of KCNH2 only when phosphorylated at Ser1137.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
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	1159
Applicable Applications for anti-KCNH2 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human KCNH2 around the phosphorylation site of Ser1137.
Tissue Specificity	Highly expressed in heart and brain. Isoforms USO are frequently overexpressed in cancer cells.
Subcellular Location	Plasma Membrane
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of Phospho-KCNH2(Ser1137) in lysates of HeLa, using Phospho-KCNH2(Ser1137) Antibody.



IHC (Immunohistochemistry)

At 1/100 staining mouse brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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



IHC (Immunohistochemistry)

At 1/100 staining rat brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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



IHC (Immunohistochemistry)

At 1/100 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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-KCNH2 antibody

Description: Pore-forming (alpha) subunit of voltage-gated inwardly rectifying potassium channel. Channel properties are modulated by cAMP and subunit assembly. Mediates the rapidly activating component of the delayed rectifying potassium current in heart (IKr) (PubMed:18559421, PubMed:26363003, PubMed:27916661).

Post Translational Modifications: Phosphorylated on serine and threonine residues. Phosphorylation by PKA inhibits ion conduction.

Subunit Structure: The potassium channel is probably composed of a homo- or heterotetrameric complex of pore-forming alpha subunits that can associate with modulating beta subunits (PubMed:27916661). Interacts with DNAJB12 and DNAJB14; chaperones DNAJB12 and DNAJB14 promote tetramerization (PubMed:27916661). Heteromultimer with KCNH6/ERG2 and KCNH7/ERG3 (By similarity). Interacts with ALG10B (By similarity). Heteromultimer with KCNE1 and KCNE2 (PubMed:9230439, PubMed:10219239). Interacts with CANX (PubMed:16361248). The core-glycosylated, but not the fully glycosylated form interacts with RNF207 (PubMed:25281747). Interacts with NDFIP1 and NDFIP2 (PubMed:26363003).

Similarity: The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position. Belongs to the potassium channel family. H (Eag) (TC 1.A.1.20) subfamily. Kv11.1/KCNH2 sub-subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	7531135
NCBI GeneID	3757
UniProt Accession #	Q12809
Molecular Weight	Observed: 90 kDa Predicted: 127 kDa
NCBI Official Full Name	Potassium voltage-gated channel subfamily H member 2
NCBI Official Synonym Full Names	potassium voltage-gated channel subfamily H member 2
NCBI Official Symbol	KCNH2
NCBI Official Synonym Symbols	ERG1; HERG; LQT2; SQT1; ERG-1; H-ERG; HERG1; Kv11.1
NCBI Protein Information	potassium voltage-gated channel subfamily H member 2
UniProt Protein Name	Potassium voltage-gated channel subfamily H member 2
UniProt Gene Name	KCNH2
UniProt Synonym Gene Names	ERG; ERG1; HERG; ERG-1; Eag-related protein 1; Ether-a-go-go-related protein 1; H-ERG; hERG-1; hERG1
UniProt Entry Name	KCNH2_HUMAN

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.