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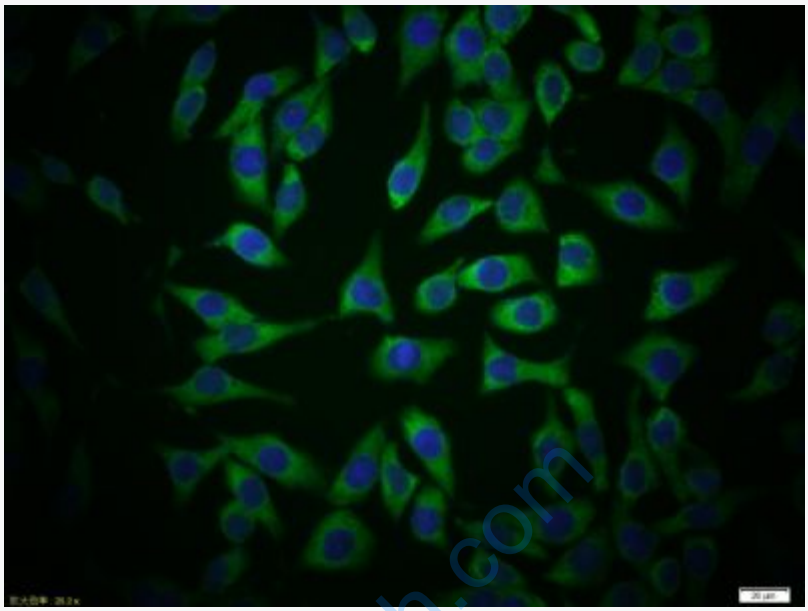
Rabbit Anti-ERG/KCNH2 antibody

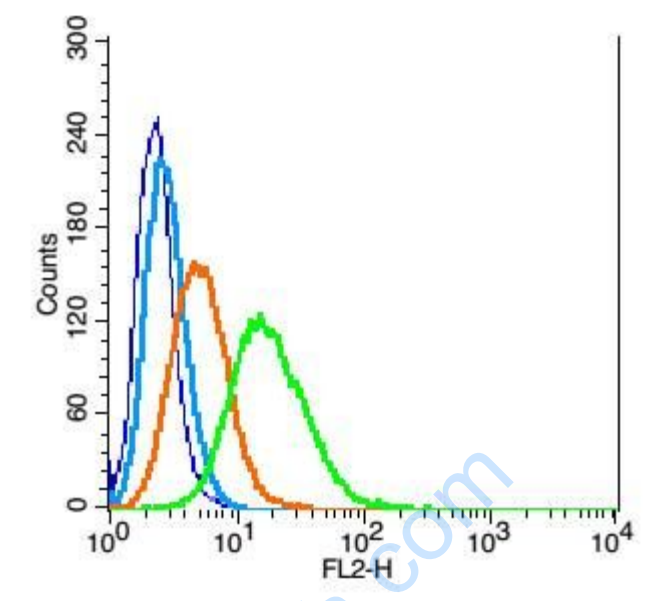
SL1815R

Product Name:	ERG/KCNH2
Chinese Name:	特异性钾离子Channel protein抗体
Alias:	ERG; ERG1; H ERG; HERG 1; HERG; HERG1; LQT 2; LQT2; Potassium channel HERG; SQT1; Voltagegated potassium channel, subfamily H, member 2; KCNH2_HUMAN.
文献引用 PubMed :	**Specific References(1)**|SL1815R has been referenced in 1 publications. **[IF=5.90]**Zhao, Jing, et al. "Chronic obstructive sleep apnea causes atrial remodeling in canines: mechanisms and implications." Basic Research in Cardiology 109.5 (2014): 1-13.**WB;Dog**. PubMed:25015734
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Horse,Rabbit,
Applications:	ELISA=1:500-1000Flow-Cyt=1μg /testICC=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	127kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HERG:1001-1159/1159<Cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The potassium voltage gated channel, subfamily H (eag related), member 2 (KCNH2) gene encodes a voltage-gated potassium channel which has an important role in cardiac action potential repolarization in the mammalian heart. Mutations in KCNH2 have been shown to cause chromosome 7-linked congenital long QT syndrome, a disorder associated with delayed cardiac repolarization, prolonged electrocardiographic QT intervals, and the development of ventricular arrhythmias. KCNH2 channels are an important target for many drugs, and have emerged as a significant type of cardiac ion channel.Highly expressed in heart and brain. **Function:** 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). Isoform 3 has no channel activity by itself, but modulates channel characteristics when associated with isoform 1. **Subunit:** The potassium channel is probably composed of a homo- or heterotetrameric complex of pore-forming alpha subunits that can associate with modulating beta subunits. Heteromultimer with KCNH6/ERG2 and KCNH7/ERG3. Interacts with ALG10B (By similarity). Heteromultimer with KCNE1 and KCNE2. **Subcellular Location:** Membrane; Multi-pass membrane protein. **Tissue Specificity:** Highly expressed in heart and brain. **Post-translational modifications:** Phosphorylated on serine and threonine residues. Phosphorylation by PKA inhibits ion conduction. **DISEASE:** Defects in KCNH2 are the cause of long QT syndrome type 2 (LQT2) [MIM:613688]. Long QT syndromes are heart disorders characterized by a prolonged QT interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to exercise or emotional stress. Deafness is often associated with LQT2. Defects in KCNH2 are the cause of short QT syndrome type 1 (SQT1) [MIM:609620]. Short QT syndromes are heart disorders characterized by idiopathic persistently and uniformly short QT interval on ECG in the absence of structural heart disease in affected individuals. They cause syncope and sudden death. **Similarity:**

	Belongs to the potassium channel family. H (Eag) (TC1.A.1.20) subfamily. Kv11.1/KCNH2 sub-subfamily. Contains 1 cyclic nucleotide-binding domain. Contains 1 PAC (PAS-associated C-terminal) domain. Contains 1 PAS (PER-ARNT-SIM) domain. **SWISS:** Q12809 **Gene ID:** 3757 **Database links:** Entrez Gene: 3757 Human Entrez Gene: 16511 Mouse Entrez Gene: 117018 Rat Omim: 152427 Human SwissProt: Q12809 Human SwissProt: O35219 Mouse SwissProt: O08962 Rat Unigene: 647099 Human Unigene: 6539 Mouse Unigene: 10970 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Tissue/cell: MCF-7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (ERG/KCNH2) Polyclonal Antibody, Unconjugated (SL1815R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL1815R) at 37°C for 90 minutes, DAPI (5ug/ml, blue, C-0033) was used to stain the cell nuclei.



Blank control: RSC96(blue).

Primary Antibody:Rabbit Anti- Cathepsin L antibody(SL1815R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min). Antibody (SL1815R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 10% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody of bs-1815R at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.