

## Anti-H-ERG/KCNH2 Antibody Picoband®

Catalog Number: A00781-3

### About KCNH2

KCNH2, also known as HERG or KV11.1, encodes the pore-forming subunit of a rapidly activating-delayed rectifier potassium channel. It is mapped to 7q36.1. KCNH2 forms the major portion of one of the ion channel proteins (the 'rapid' delayed rectifier current (IKr)) that conducts potassium (K+) ions out of the muscle cells of the heart (cardiac myocytes), and this current is critical in correctly timing the return to the resting state (repolarization) of the cell membrane during the cardiac action potential. What's more, KCNH2 channels show gating properties consistent with many of the outwardly rectifying potassium channels, but they also have an inactivation mechanism that attenuates efflux during depolarization.

### Overview

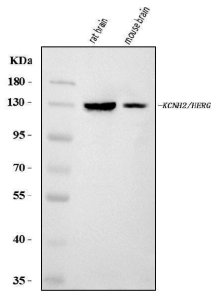
Product Name	Anti-H-ERG/KCNH2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-H-ERG/KCNH2 Antibody Picoband® catalog # A00781-3. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q12809

### Technical Details

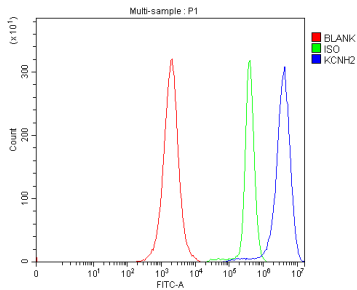
Immunogen	E.coli-derived human H-ERG/KCNH2 recombinant protein (Position: A121-V1074).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5 ug/ml, -

## Anti-H-ERG/KCNH2 Antibody Picoband® (A00781-3) Images



Western blot analysis of H-ERG/KCNH2 using anti-H-ERG/KCNH2 antibody (A00781-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-H-ERG/KCNH2 antigen affinity purified polyclonal antibody (Catalog # A00781-3) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for H-ERG/KCNH2 at approximately 130 kDa. The expected band size for H-ERG/KCNH2 is at 127 kDa.



Flow Cytometry analysis of JK cells using anti-H-ERG/KCNH2 antibody (A00781-3). Overlay histogram showing JK cells stained with A00781-3 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-H-ERG/KCNH2 Antibody (A00781-3, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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### Anti-H-ERG/KCNH2 Antibody

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