

# KCNE1L (P-13): sc-161762

## BACKGROUND

KCNE genes encode small, single transmembrane domain peptides that associate with pore-forming  $\alpha$ -subunits to form  $K^+$  channels with unique characteristics. Voltage-gated  $K^+$  channels in the plasma membrane control the repolarization and the frequency of action potentials in neurons, muscles and other excitable cells. KCNE1L (KCNE1-like), also known as KCNE5, potassium voltage-gated channel subfamily E member 1-like protein or AMMECR2, is a 142 amino acid single-pass type I membrane protein belonging to the potassium channel KCNE family. Defects of the KCNE1L gene have been linked to the cardiac and some neurological abnormalities observed in patients with AMME (alport syndrome, mental retardation, midface hypoplasia and elliptocytosis) contiguous gene syndrome. KCNE1L is primarily expressed in skeletal muscle, brain, placenta, spinal cord and heart.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: KCNE1L (human) mapping to Xq23; Kcne1l (mouse) mapping to X F2.

## SOURCE

KCNE1L (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KCNE1L of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161762 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

KCNE1L (P-13) is recommended for detection of KCNE1L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with KCNE1.

KCNE1L (P-13) is also recommended for detection of KCNE1L in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for KCNE1L siRNA (h): sc-91235, KCNE1L siRNA (m): sc-146357, KCNE1L shRNA Plasmid (h): sc-91235-SH, KCNE1L shRNA Plasmid (m): sc-146357-SH, KCNE1L shRNA (h) Lentiviral Particles: sc-91235-V and KCNE1L shRNA (m) Lentiviral Particles: sc-146357-V.

Molecular Weight of KCNE1L: 15 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.