

KCNMB4 (Q-14): sc-161769

BACKGROUND

MaxiK channels are large conductance voltage and Ca²⁺ activated potassium channels which are formed by tetramers of MaxiK α subunits, which create pores that are used for smooth muscle tone and neuronal excitability. These MaxiK α subunits have the ability to assemble with MaxiK β subunits that are structurally related and are able to regulate the function of MaxiK α subunits. KCNMB4 (potassium large conductance calcium-activated channel, subfamily M, β member 4), also known as Slo- β -4 or Maxi K channel subunit β -4, is a 210 amino acid multi-pass membrane protein belonging to the KCNMB family. Predominantly expressed in brain, KCNMB4 is a regulatory subunit of the calcium activated potassium MaxiK α channel. KCNMB4 contributes to MaxiK α channel diversity by modulating calcium sensitivity and gating kinetics of MaxiK α .

CHROMOSOMAL LOCATION

Genetic locus: KCNMB4 (human) mapping to 12q15; Kcnmb4 (mouse) mapping to 10 D2.

SOURCE

KCNMB4 (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of KCNMB4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-161769 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

KCNMB4 (Q-14) is recommended for detection of KCNMB4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 KCNMB2 or KCNMB3.

KCNMB4 (Q-14) is also recommended for detection of KCNMB4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for KCNMB4 siRNA (h): sc-96190, KCNMB4 siRNA (m): sc-146370, KCNMB4 shRNA Plasmid (h): sc-96190-SH, KCNMB4 shRNA Plasmid (m): sc-146370-SH, KCNMB4 shRNA (h) Lentiviral Particles: sc-96190-V and KCNMB4 shRNA (m) Lentiviral Particles: sc-146370-V.

Molecular Weight of KCNMB4: 24 kDa.

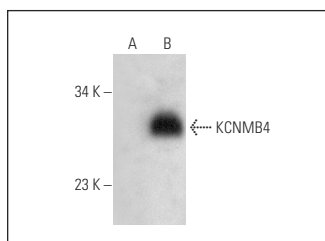
Molecular Weight of glycosylated KCNMB4: 32 kDa.

Positive Controls: KCNMB4 (h): 293T Lysate: sc-115563.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



KCNMB4 (Q-14): sc-161769. Western blot analysis of KCNMB4 expression in non-transfected: sc-117752 (A) and human KCNMB4 transfected: sc-115563 (B) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **KCNMB4 (B-6): sc-515712** or **KCNMB4 (E-5): sc-515713**, our highly recommended monoclonal alternatives to KCNMB4 (Q-14).