

MaxiK α (H-300): sc-33607

BACKGROUND

The KCNA1 gene, located on chromosome 10q22.3, encodes MaxiK α (also designated calcium-activated potassium channel, large conductance calcium- and voltage-dependent potassium channel α subunit, Slo α subunit and BKCA α subunit). MaxiK α carboxyl terminal is spliced to form nine transcripts. MaxiK α is expressed in neurons and smooth muscle tissue. It associates with MaxiK β to form Ca²⁺-activated K⁺ channels (also designated Maxi-K or BK channels) and forms the potassium-permeable pore in these channels, which respond primarily to increases in intracellular calcium ion concentrations. Maxi-K channels are also known to interact with hormones, such as estradiol. MaxiK β can regulate the sensitivity of MaxiK α to calcium. Maxi-K channels may be involved in cell shrinkage and caspase activation, which leads to pulmonary vascular smooth muscle cell apoptosis.

CHROMOSOMAL LOCATION

Genetic locus: KCNA1 (human) mapping to 10q22.3; Kcna1 (mouse) mapping to 14 A3.

SOURCE

MaxiK α (H-300) is a rabbit polyclonal antibody raised against amino acids 937-1236 mapping at the C-terminus of MaxiK α 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.

STORAGE

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

APPLICATIONS

MaxiK α (H-300) is recommended for detection of MaxiK α 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).

MaxiK α (H-300) is also recommended for detection of MaxiK α in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for MaxiK α siRNA (h): sc-42511, MaxiK α siRNA (m): sc-42512, MaxiK α shRNA Plasmid (h): sc-42511-SH, MaxiK α shRNA Plasmid (m): sc-42512-SH, MaxiK α shRNA (h) Lentiviral Particles: sc-42511-V and MaxiK α shRNA (m) Lentiviral Particles: sc-42512-V.

Molecular Weight of MaxiK α native α subunit: 125 kDa.

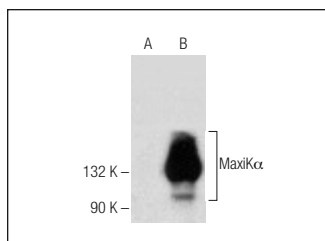
Molecular Weight of MaxiK α purified α subunit: 65 kDa.

Positive Controls: human MaxiK α transfected HEK293T whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MaxiK α (H-300): sc-33607. Western blot analysis of MaxiK α expression in non transfected (A) and human MaxiK α transfected (B) HEK293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Jia, X., et al. 2013. Involvement of large conductance Ca²⁺-activated K⁺ channel in laminar shear stress-induced inhibition of vascular smooth muscle cell proliferation. Pflugers Arch. 465: 221-232.

RESEARCH USE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **MaxiK α (B-1): sc-374142**, our highly recommended monoclonal alternative to MaxiK α (H-300).