KCNH1 (C-11): sc-398585

BACKGROUND
Voltage-gated potassium channels play an essential role in controlling cellular excitability in the nervous system. They regulate a variety of properties including membrane potential as well as the frequency and structure of action potentials. KCNH1 (potassium voltage-gated channel, subfamily H (eag-related), member 1), also known as ether-a-go-go potassium channel 1, voltage-gated potassium channel subunit Kv10.1, EAG, EAG1 or h-eag, is a 989 amino acid multi-pass membrane protein belonging to the potassium channel family and H [Eag] subfamily. KCNH1 is highly expressed in myoblasts and brain, forms two alternatively spliced isoforms and exists as a pore-forming (κ) subunit of a voltage-gated non-inactivating delayed rectifier potassium channel. Encoded by a gene located on human chromosome 1, KCNH1 forms a heteromultimer with KCNH5 and also interacts with ALG10.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: KCNH1 (human) mapping to 1q32.2; Kcnh1 (mouse) mapping to 1 H6.

SOURCE
KCNH1 (C-11) is a mouse monoclonal antibody raised against amino acids 751-875 mapping near the C-terminus of KCNH1 of human origin.

PRODUCT
Each vial contains 200 µg IgG; kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KCNH1 (C-11) is available conjugated to agarose (sc-398585 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398585 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398585 PE), fluorescein (sc-398585 FITC), Alexa Fluor® 488 (sc-398585 AF488), Alexa Fluor® 546 (sc-398585 AF546), Alexa Fluor® 594 (sc-398585 AF594) or Alexa Fluor® 647 (sc-398585 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398585 AF680) or Alexa Fluor® 790 (sc-398585 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS
KCNH1 (C-11) is recommended for detection of KCNH1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for KCNH1 siRNA (h): sc-78963, KCNH1 siRNA (m): sc-146362, KCNH1 shRNA Plasmid (h): sc-78963-SH, KCNH1 shRNA Plasmid (m): sc-146362-SH, KCNH1 shRNA (h) Lentiviral Particles: sc-78963-V and KCNH1 shRNA (m) Lentiviral Particles: sc-146362-V.

Molecular Weight of KCNH1: 111 kDa.

Positive Controls: SolB cell lysate: sc-2249, L8 cell lysate: sc-3807 or SH-SYSY cell lysate: sc-3812.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP-BSA: sc-516102 or m-IgG BSA-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blotting Reagent: sc-516214 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 m-IgGックス BP-FITC: sc-516140 or m-IgG克斯 BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

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.

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