

KCNH5 (h): 293T Lysate: sc-111565

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. KCNH5, also called potassium voltage-gated channel subfamily H member 5 or human ether-a-go-go potassium channel 2 (hEAG2), is the α subunit of a multi-pass transmembrane potassium channel family. KCNH5 functions in forming the pore of the voltage-gated channel. The channel itself is a homo- or heterotetrameric structure of α subunits that associates with modulating β subunits. KCNH5 is expressed in a wide variety of tissues including brain, skeletal muscle, heart, placenta, lung, liver and, to a lesser extent, kidney.

REFERENCES

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2. Schönherr, R., Gessner, G., Lober, K. and Heinemann, S.H. 2002. Functional distinction of human eAg1 and eAg2 potassium channels. *FEBS Lett.* 514: 204-208.
3. Ju, M. and Wray, D. 2002. Molecular identification and characterisation of the human eAg2 potassium channel. *FEBS Lett.* 524: 204-210.
4. Ju, M. and Wray, D. 2006. Molecular regions responsible for differences in activation between heag channels. *Biochem. Biophys. Res. Commun.* 342: 1088-1097.
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CHROMOSOMAL LOCATION

Genetic locus: KCNH5 (human) mapping to 14q23.2.

PRODUCT

KCNH5 (h): 293T Lysate represents a lysate of human KCNH5 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

KCNH5 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive KCNH5 antibodies. Recommended use: 10-20 μ l per lane.

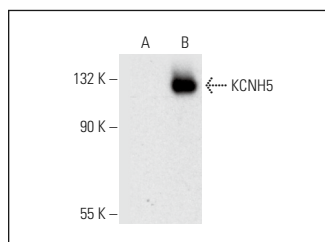
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

KCNH5 (A-6): sc-393777 is recommended as a positive control antibody for Western Blot analysis of enhanced human KCNH5 expression in KCNH5 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

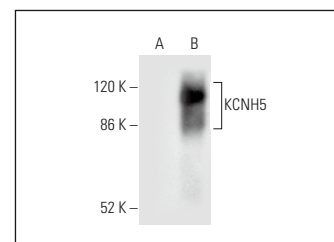
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



KCNH5 (A-6): sc-393777. Western blot analysis of KCNH5 expression in non-transfected: sc-117752 (A) and human KCNH5 transfected: sc-111565 (B) 293T whole cell lysates.



KCNH5 (A-8): sc-398458. Western blot analysis of KCNH5 expression in non-transfected: sc-117752 (A) and human KCNH5 transfected: sc-111565 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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