

KV9.3 (h4): 293 Lysate: sc-158673

BACKGROUND

Voltage-gated K⁺ channels in the plasma membrane control the repolarization and the frequency of action potentials in neurons, muscles and other excitable cells. The KV gene family encodes more than 30 proteins that comprise the subunits of the K⁺ channels, and they vary in their gating and permeation properties, subcellular distribution and expression patterns. Functional KV channels assemble as tetramers consisting of pore-forming α subunits (KV), which include the KV1, KV2, KV3, KV4 and KV9 proteins, and accessory or KV-subunits that modify the gating properties of the coexpressed KV subunits. KV9.3 is a K⁺ channel subunit that reduces the ion flow and regulates channel activity. It localizes to the cellular membrane and is expressed in most tissues, with highest expression detected in the lung and no detection in peripheral blood lymphocytes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KCNS3 (human) mapping to 2p24.2.

PRODUCT

KV9.3 (h4): 293 Lysate represents a lysate of human KV9.3 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

KV9.3 (h4): 293 Lysate is suitable as a Western Blotting positive control for human reactive KV9.3 antibodies. Recommended use: 10-20 μ l per lane.

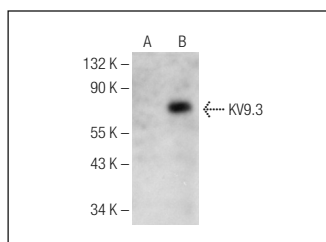
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

KV9.3 (D-11): sc-365497 is recommended as a positive control antibody for Western Blot analysis of enhanced human KV9.3 expression in KV9.3 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

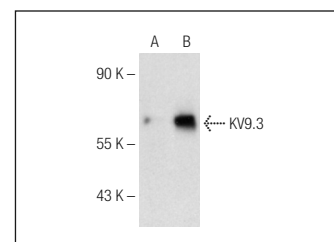
RECOMMENDED SUPPORT REAGENTS

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



KV9.3 (D-11): sc-365497. Western blot analysis of KV9.3 expression in non-transfected: sc-110760 (A) and human KV9.3 transfected: sc-158673 (B) 293 whole cell lysates.



KV9.3 (D-6): sc-365979. Western blot analysis of KV9.3 expression in non-transfected: sc-110760 (A) and human KV9.3 transfected: sc-158673 (B) 293 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.

RESEARCH USE

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

PROTOCOLS

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