



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic)

KV9.3 (h5): 293T Lysate: sc-158672

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

1. Deal, K.K., Lovinger, D.M. and Tamkun, M.M. 1994. The brain KV1.1 potassium channel: *in vitro* and *in vivo* studies on subunit assembly and posttranslational processing. *J. Neurosci.* 14: 1666-1676.
2. Veh, R.W., Lichtinghagen, R., Sewing, S., Wunder, F., Grumbach, I.M. and Pongs, O. 1995. Immunohistochemical localization of five members of the KV1 channel subunits: contrasting subcellular locations and neuron-specific co-localizations in rat brain. *Eur. J. Neurosci.* 7: 2189-2205.
3. Shepard, A.R. and Rae, J.L. 1999. Electrically silent potassium channel subunits from human lens epithelium. *Am. J. Physiol.* 277: C412-C424.
4. Leicher, T., Bähring, R., Isbrandt, D. and Pongs, O. 1999. Coexpression of the KCNA3B gene product with KV1.5 leads to a novel A-type potassium channel. *J. Biol. Chem.* 273: 35095-35101.
5. Manganas, L.N. and Trimmer, J.S. 2000. Subunit composition determines KV1 potassium channel surface expression. *J. Biol. Chem.* 275: 29685-29693.
6. Kerschensteiner, D., Soto, F. and Stocker, M. 2005. Fluorescence measurements reveal stoichiometry of K⁺ channels formed by modulatory and delayed rectifier α -subunits. *Proc. Natl. Acad. Sci. USA* 102: 6160-6165.

CHROMOSOMAL LOCATION

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

PRODUCT

KV9.3 (h5): 293T Lysate represents a lysate of human KV9.3 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

KV9.3 (h5): 293T Lysate is suitable as a Western Blotting positive control for human reactive KV9.3 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.

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.