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

SANTA CRUZ BIOTECHNOLOGY, INC.

VR1 (m2): 293 Lysate: sc-179742

BACKGROUND

Vanilloid receptor 1 (VR1), also designated capsaicin receptor, is a nonselective cation channel, structurally related to members of the TRP family of ion channels. VR1 is activated by capsaicin, the active ingredient in chili peppers, by heat and by an increase in protons at sites of infection, inflammation and ischemia. By creating moderately acidic conditions, protons are able to lower the temperature threshold for VR1 activation, thus identifying VR1 as a molecular integrator of chemical and physical stimuli that elicit pain. VR1 is expressed in primary sensory neurons and vagal nerves and activated VR1 induces the influx of cations, particularly Ca^{2+} and Na^{+} ions. The vanilloid receptor may also be a molecular target for endogenous anandamide, in addition to the cannabinoid receptors, in the nervous and cardiovascular systems.

REFERENCES

1. Caterina, M.J., et al. 1997. The capsaicin receptor: a heat-activated ion channel in the pain pathway. Nature 389: 816-824.
2. Tominaga, M., et al. 1998. The cloned capsaicin receptor integrates multiple pain-producing stimuli. Neuron 21: 531-543.
3. Cesare, P., et al. 1999. Ion channels gated by heat. PNAS 96: 7658-7663.
4. Sasamura, T., et al. 1999. Peripheral and central actions of capsaicin and VR1 receptor. Jpn. J. Pharmacol. 80: 275-280.
5. Zygmunt, P.M., et al. 1999. Vanilloid receptors on sensory nerves mediate the vasodilator action of anandamide. Nature 400: 452-457.
6. Jin, Y.H., et al. 2004. Purinergic and vanilloid receptor activation releases glutamate from separate cranial afferent terminals in nucleus tractus solitarius. J. Neurosci. 24: 4709-4717.
7. Jung, J., et al. 2004. Phosphorylation of vanilloid receptor 1 by Ca^{2+}/calmodulin-dependent kinase II regulates its vanilloid binding. J. Biol. Chem. 279: 7048-7054.
8. Morenilla-Palao, C., et al. 2004. Regulated exocytosis contributes to protein kinase C potentiation of vanilloid receptor activity. J. Biol. Chem. 279: 25665-25672.

CHROMOSOMAL LOCATION

Genetic locus: Trpv1 (mouse) mapping to 11 B4.

PRODUCT

VR1 (m2): 293 Lysate represents a lysate of mouse VR1 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

VR1 (m2): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive VR1 antibodies. Recommended use: 10-20 µl per lane.

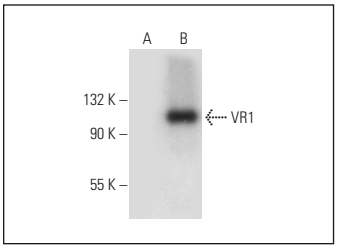
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

VR1 (E-8): sc-398417 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse VR1 expression in VR1 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-IgGκ BP-HRP: sc-516102 or m-IgGκ 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



VR1 (E-8): sc-398417. Western blot analysis of VR1 expression in non-transfected: sc-110760 (**A**) and mouse VR1 transfected: sc-179742 (**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.