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VR1 (h): 293T Lysate: sc-158096

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

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8. Karai, L.J., et al. 2004. Vanilloid receptor 1 regulates multiple calcium compartments and contributes to Ca^{2+} -induced Ca^{2+} release in sensory neurons. *J. Biol. Chem.* 279: 16377-16387.
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CHROMOSOMAL LOCATION

Genetic locus: TRPV1 (human) mapping to 17p13.2.

PRODUCT

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

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.

APPLICATIONS

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

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

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.