**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 Ca²⁺ 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**

**CHROMOSOMAL LOCATION**
Genetic locus: TRPV1 (human) mapping to 17p13.3.

**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.

**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.

VR1 (R-130): sc-28759 is recommended as a positive control antibody for Western Blot analysis of enhanced human VR1 expression in VR1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

**RECOMMENDED SECONDARY REAGENTS**
To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

**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 or our catalog for detailed protocols and support products.