

For research use only

Thermosensitive TRP Channel Anti Rat TRPV2 (VRL-1) Polyclonal Antibody

TRPV2 (transient receptor potential cation channel, subfamily V, member 2) gene is isolated as a homologue of vanilloid receptor, VR-1 (now named TRPV1). TRPV2 is supposed to be an ion channel which has 6 transmembrane regions. And it's obvious that TRPV2 is activated by heat more than 50°C, not by vanilloids (capsaicin and RTX) or protons.

It is thought that myelinated A δ fiber have heat sensitivity neuron with temperature threshold of 52 $^{\circ}$ C. TRPV2 is proved to exist in myelinated A δ fiber by immunohistochemistry.

This polyclonal antibody is specific for TRPV2 of rat, and has been proved to be useful for the immunohistochemistry.

Package Size $5 \mu g$ (50 μ L/vial)

Format Rabbit polyclonal antibody purified by antigen G affinity chromatography.

Buffer PBS [containing 2% Block Ace as a stabilizer, 0.1% Proclin as a bacteriostat]

Storage Store below -20°C

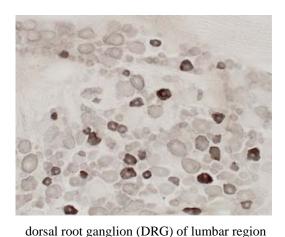
Once thawed, store at 4°C. Repeated freeze-thaw cycles should be avoided

Purification method This antibody was purified from rabbit serum by Protein G affinity chromatography. Working dilution for immunohistochemistry: $0.1 \mu \text{ g/mL}$;



dorsal root ganglion (DRG) of lumbar region (normal rat), 30 μ m of thickness Hukuoka, T. Second Department of Anatomy, Hyogo college of medicine, Hyogo, Japan

Preparation of antibodies and instruction
Tominaga, M.
Department of Physiology, Faculty of Medicine,
Mie University, Japan



(normal rat), 30 μ m of thickness Hukuoka, T. Second Department of Anatomy, Hyogo college of medicine, Hyogo, Japan

Thermosensitive TRP Channel Anti Rat TRPV2 (VRL-1) Polyclonal Antibody

[References]

- 1. Tominaga M, & Julius D (2000): capsaicin receptor in the pain pathway. Jpn J Pharmacol 83(1): 20-24
- 2. Tominaga M, Caterina MJ, Malmberg AB, Rosan TA, Gilbert H, Skinner K, Raumann BE, Basbaum AI, & Julius D (1998): The cloned capsaicin receptor integrates multiple pain-producing stimuli. Neuron 21(3): 531-543
- 3. Davis JB, Gray J, Gunthorpe MJ, Hatcher JP, Davey PT, Overend P, Harries MH, Latcham J, Clapham C, Atkinson K, Hughes SA, Rance K, Grau E, Harper AJ, Pugh PL, Rogers DC, Bingham S, Randall A, & Sheardown SA (2000): Vanilloid receptor-1 is essential for inflammatory thermal hyperalgesia. Nature 405(6783): 183-187
- 4. Hwang SW, Cho H, Kwak J, Lee SY, Kang CJ, Jung J, Cho S, Min KH, Suh YG, Kim D, & Oh U (2000): Direct activation of capsaicin receptors by products of lipoxygenases: endogenous capsaicin-like substances. Proc Natl Acad Sci USA 97(11): 6155-6160
- 5. Caterina MJ, Rosen TA, Tominaga M, Brake AJ, & Julius D (1999): A capsaicin-receptor homologue with a high threshold for noxious heat. Nature 398(6726): 436-441

Chemical structure of capsaicin

Manufacturer



7-1-14 Minatojimaminami-machi, Chuo-ku, Kobe, Japan 650-0047 Telephone: +81-78-306-0295 FAX:+81-78-306-0296 URL:http://www.transgenic.co.jp techstaff@transgenic.co.jp