

# TRPV4 (H-79): sc-98592

## BACKGROUND

The transient receptor potential (TRP) protein family consists of a diverse group of cation channels functioning in a variety of homeostatic and regulatory pathways. Four subfamilies exist, based on channel domain homology, not activating stimuli: C type (canonical or classical), V type (vanilloid receptor related), M type (melastatin related) and P type (PKD). TRPV4, also designated VRL-2, TRP12, VR-OAC and OTRPC4, belongs to the V type subfamily, and plays a role in systemic osmoregulation. TRPV4 is a calcium channel activated by various stimuli, including thermal stress, fatty acid metabolites and hypotonicity. TRPV4 is highly expressed in lung and kidney.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TRPV4 (human) mapping to 12q24.11; Trpv4 (mouse) mapping to 5 F.

## SOURCE

TRPV4 (H-79) is a rabbit polyclonal antibody raised against amino acids 62-134 mapping near the N-terminus of TRPV4 of human origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

TRPV4 (H-79) is recommended for detection of TRPV4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TRPV4 (H-79) is also recommended for detection of TRPV4 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for TRPV4 siRNA (h): sc-61726, TRPV4 siRNA (m): sc-61727, TRPV4 shRNA Plasmid (h): sc-61726-SH, TRPV4 shRNA Plasmid (m): sc-61727-SH, TRPV4 shRNA (h) Lentiviral Particles: sc-61726-V and TRPV4 shRNA (m) Lentiviral Particles: sc-61727-V.

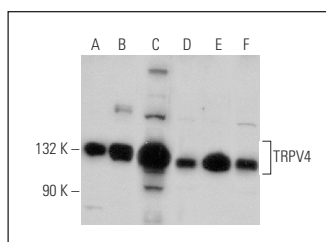
Molecular Weight of glycosylated TRPV4: 98-107 kDa.

Positive Controls: F9 cell lysate: sc-2245, Y79 cell lysate: sc-2240 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

## 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



TRPV4 (H-79): sc-98592. Western blot analysis of TRPV4 expression in Jurkat (A), NTERA-2 cl.D1 (B), F9 (C), SH-SY5Y (D), Y79 (E) and PC-12 (F) whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\* Stable for one year from the date of shipment. Non-hazardous. No MSDS required.