

# TRPC4AP (N-16): sc-98183

## BACKGROUND

TRPC4AP (transient receptor potential cation channel, subfamily C, member 4 associated protein), also known as TRUSS or TRRP4AP, is a 797 amino acid protein that is expressed in a variety of tissues, with highest expression in liver, heart, testis and brain. Thought to function as a scaffolding protein, TRPC4AP interacts with TNF-R1 and may both link TNF-R1 to the IKK signalosome complex, and participate in the activation of NF $\kappa$ B p50, an event that occurs in response to TNF-R1 ligation. TRPC4AP exists as multiple alternatively spliced isoforms that are encoded by a gene which maps to human chromosome 20. Comprising approximately 2% of the human genome, chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome.

## REFERENCES

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2. Soond, S.M., Terry, J.L., Colbert, J.D. and Riches, D.W. 2003. TRUSS, a novel tumor necrosis factor receptor 1 scaffolding protein that mediates activation of the transcription factor NF $\kappa$ B. *Mol. Cell. Biol.* 23: 8334-8344.
3. Ville, D., Kaminska, A., Bahi-Buisson, N., Biraben, A., Plouin, P., Telvi, L., Dulac, O. and Chiron, C. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. *Epilepsia* 47: 543-549.
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5. Poduslo, S.E., Huang, R., Huang, J. and Smith, S. 2008. Genome screen of late-onset Alzheimer's extended pedigrees identifies TRPC4AP by haplotype analysis. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 150B: 50-55.
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## CHROMOSOMAL LOCATION

Genetic locus: TRPC4AP (human) mapping to 20q11.22; Trpc4ap (mouse) mapping to 2 H1.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## SOURCE

TRPC4AP (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TRPC4AP of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98183 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TRPC4AP (N-16) is recommended for detection of TRPC4AP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other TRPC family members.

Suitable for use as control antibody for TRPC4AP siRNA (h): sc-76758, TRPC4AP siRNA (m): sc-154692, TRPC4AP shRNA Plasmid (h): sc-76758-SH, TRPC4AP shRNA Plasmid (m): sc-154692-SH, TRPC4AP shRNA (h) Lentiviral Particles: sc-76758-V and TRPC4AP shRNA (m) Lentiviral Particles: sc-154692-V.

Molecular Weight of TRPC4AP: 91 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.