SANTA CRUZ BIOTECHNOLOGY, INC.

T2R16 (K-14): sc-163420

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The Power to Question

BACKGROUND

T2R16 (taste receptor type 2 member 16), also known as TAS2R16, is a 291 amino acid multi-pass membrane protein that belongs to the G-protein coupled receptor T2R family. Acting in the oral cavity and the gastrointestinal tract, T2R16 is a gustducin-coupled receptor that is implicated in the perception of bitter compounds. T2R16 mediates responses to certain taste through PLC β2, a phospholipase C selectively expressed in taste tissue, and the calcium-regulated cation channel TRPM5. Expressed in a subset of gustducin-positive taste receptor cells of the tongue and epithelia, T2R16 confers bitter perception of salicin to non-taster mice. The gene that encodes T2R16 consists of 996 bases and maps to human chromosome 7q31. Chromosome 7 houses over 1,000 genes, comprises nearly 5% of the human genome and has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The Lys-172 polymorphism in T2R16 is associated with genetic susceptibility to alcoholism.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TAS2R16 (human) mapping to 7q31.32.

SOURCE

T2R16 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of T2R16 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-163420 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

T2R16 (K-14) is recommended for detection of T2R16 of 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 T2R family members.

Suitable for use as control antibody for T2R16 siRNA (h): sc-89454, T2R16 shRNA Plasmid (h): sc-89454-SH and T2R16 shRNA (h) Lentiviral Particles: sc-89454-V.

Molecular Weight of T2R16: 34 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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) 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™ Mounting Medium: sc-24941.

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.