

T2R42 (C-13): sc-169496

BACKGROUND

T2R42 (taste receptor type 2 member 42), also known as TAS2R42, T2R55 (taste receptor type 2 member 55) or TAS2R55, is a 314 amino acid multi-pass membrane protein that belongs to the G protein-coupled receptor T2R family. T2R42 acts as a receptor that may play a role in the perception of bitterness, and is also thought to be involved in sensing the chemical composition of gastrointestinal content. As a gustducin-linked receptor, the activity of T2R42 may stimulate $G_{\alpha t}$ (α gustducin), mediate PLC $\beta 2$ activation and lead to the gating of TRPM5. The gene that encodes T2R42 contains 945 bases and maps to human chromosome 12p13.2. Encoding over 1,100 genes, chromosome 12 comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TAS2R42 (human) mapping to 12p13.2.

SOURCE

T2R42 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of T2R42 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 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169496 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

T2R42 (C-13) is recommended for detection of T2R42 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 T2R42 siRNA (h): sc-96186, T2R42 shRNA Plasmid (h): sc-96186-SH and T2R42 shRNA (h) Lentiviral Particles: sc-96186-V.

Molecular Weight of T2R42: 36 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.