



## T2R6 (T-12): sc-34288

### BACKGROUND

The sense of taste provides animals with valuable information about the quality and nutritional value of food. A family of G protein-coupled receptors are involved in taste perception and include T1R, which is involved in sweet and umami taste perception, and T2R, which is involved in bitter taste perception. Both types of taste receptors couple to various G proteins to initiate signal transduction cascades. Single taste receptor cells express a variety of T2Rs, suggesting that each cell is capable of recognizing multiple tastants. T2R6 (also designated T2R30, mt2r42, STC 7-4 or taste receptor, type 2, member 130) is an integral membrane receptor protein in mice that may play a role in the perception of bitterness and in sensing the chemical composition of the gastrointestinal content. The activity of this receptor may stimulate  $\alpha$ -gustducin, mediate PLC- $\beta$ -2 activation and lead to the gating of TRPM5. T2R6 is expressed in subsets of taste receptor cells of the tongue and palate epithelium and exclusively in gustducin-positive cells. The human homolog of T2R6, designated T2R7 (TAS2R7, TRB4 or taste receptor, type 2, member 7) is a G protein-coupled receptor expressed in taste receptor cells of the tongue and palate epithelia.

### REFERENCES

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- Scott, K.. 2004. The sweet and the bitter of mammalian taste. *Curr. Opin. Neurobiol.* 14: 423-427.
- He, W., Yasumatsu, K., Varadarajan, V., Yamada, A., Lem, J., Ninomiya, Y., Margolskee, R.F. and Damak, S. 2004. Umami taste responses are mediated by  $\alpha$ -transducin and  $\alpha$ -gustducin. *J. Neurosci.* 24: 7674-7680.

### CHROMOSOMAL LOCATION

Genetic locus: TAS2R7 (human) mapping to 12p13; Tas2r130 (mouse) mapping to 6 F3.

### SOURCE

T2R6 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of T2R6 of mouse 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-34288 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

T2R6 (T-12) is recommended for detection of T2R6 of mouse and rat origin and T2R7 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).

Suitable for use as control antibody for T2R7 siRNA (h): sc-45336 and T2R6 siRNA (m): sc-45337.

Molecular Weight of T2R6/T2R7: 35.8 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.

### 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.