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TAS1R3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16368a

Product Information

Application	WB, E
Primary Accession	Q7RTX0
Other Accession	NP_689414.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35346
Calculated MW	93386
Antigen Region	229-258

Additional Information

Gene ID	83756
Other Names	Taste receptor type 1 member 3, Sweet taste receptor T1R3, TAS1R3, T1R3, TR3
Target/Specificity	This TAS1R3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 229-258 amino acids from the N-terminal region of human TAS1R3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TAS1R3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TAS1R3
Synonyms	T1R3, TR3
Function	Key component of the sweet and umami taste receptors

(PubMed:11917125, PubMed:40339580, PubMed:40754567, PubMed:40555359). TAS1R1 and TAS1R3 form the umami receptor and respond to the umami taste stimulus (the taste of monosodium glutamate) (PubMed:11917125). TAS1R2 and TAS1R3 form the sweet taste receptor and recognize diverse natural and synthetic sweeteners (PubMed:11917125, PubMed:40339580, PubMed:40754567, PubMed:40555359). The sweet taste receptor has lower affinity for natural sugars than for synthetic sweeteners (PubMed:40339580, PubMed:40555359). Essential for the recognition and response to the disaccharide trehalose (PubMed:12892531). Functions as a G protein-coupled receptor and primarily signals through the gustducin heterotrimer (PubMed:40339580). Sequence differences within and between species can significantly influence the selectivity and specificity of taste responses (By similarity).

Cellular Location Cell membrane; Multi-pass membrane protein

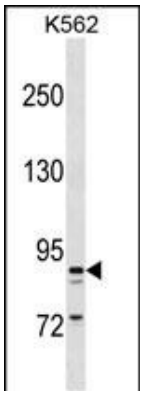
Background

The TAS1R3 gene encodes the human homolog of mouse Sac, a major determinant of differences between sweet-sensitive and -insensitive mouse strains in their responsiveness to sucrose, saccharine, and other sweeteners (Max et al., 2001 [PubMed 11326277]).

References

Assadi-Porter, F.M., et al. J. Mol. Biol. 398(4):584-599(2010)
Assadi-Porter, F.M., et al. Biochim. Biophys. Acta 1798(2):82-86(2010)
Chen, Q.Y., et al. Am. J. Clin. Nutr. 90 (3), 770S-779S (2009) :
Chandrashekar, J., et al. Nature 444(7117):288-294(2006)
Xu, H., et al. Proc. Natl. Acad. Sci. U.S.A. 101(39):14258-14263(2004)

Images



TAS1R3 Antibody (N-term) (Cat. #AP16368a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the TAS1R3 antibody detected the TAS1R3 protein (arrow).

Citations

- TR3 is involved in hypoxia-induced apoptosis resistance in lung cancer cells downstream of HIF-1α.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.