



Goat Anti-human GNAT3 polyclonal antibody (CABT-L964)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	GNAT3
Immunogen	Peptide with sequence C-KNQFLDLNLKKEDKE corresponding to internal region according to NP_001095856.1.
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Immunogen affinity purified
Conjugate	Unconjugated
Applications	IHC, IHC-P, ELISA
Format	Liquid.
Concentration	0.5 mg/ml
Size	100 µg
Buffer	0.5 mg/ml Tris (pH 7.3) and 0.5% BSA
Preservative	0.02% Sodium Azide
Storage	-20° C, Avoid Freeze/Thaw Cycles

BACKGROUND

Introduction

Guanine nucleotide-binding protein (G protein) alpha subunit playing a prominent role in bitter and sweet taste transduction as well as in umami (monosodium glutamate, monopotassium glutamate, and inosine monophosphate) taste transduction. Transduction by this alpha subunit involves coupling of specific cell-surface receptors with a cGMP-phosphodiesterase; Activation of phosphodiesterase lowers intracellular levels of cAMP and cGMP which may open a cyclic nucleotide-suppressible cation channel leading to influx of calcium, ultimately leading to release of neurotransmitter. GNAT3 can functionally couple to taste receptors to transmit intracellular signal: receptor heterodimer TAS1R2/TAS1R3 senses sweetness and TAS1R1/TAS1R3 transduces umami taste, whereas the T2R family GPCRs act as bitter sensors. Functions also as luminal sugar sensors in the gut to control the expression of the Na⁺-glucose transporter SGLT1 in response to dietary sugar, as well as the secretion of Glucagon-like peptide-1, GLP-1 and glucose-dependent insulinotropic polypeptide, GIP. Thus, may modulate the gut capacity to absorb sugars, with implications in malabsorption syndromes and diet-related disorders including diabetes and obesity.

Keywords

GNAT3;Gustducin;Gustducin alpha-3 chain;GDCA

GENE INFORMATION

Gene Name

GNAT3

Synonyms

GNAT3, Gustducin, Gustducin alpha-3 chain, GDCA

Entrez Gene ID

[346562](#)

UniProt ID

[A8MTJ3](#)