



Rabbit Anti-human GNAT3 polyclonal antibody (CABT-L963)

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

PRODUCT INFORMATION

Target	GNAT3
Immunogen	KLH conjugated synthetic peptide between 78-105 amino acids from the central region of human GNAT3.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Antigen affinity chromatography
Conjugate	Unconjugated
Applications	FC, IHC-P, WB
Format	Liquid.
Concentration	0.5 mg/ml
Buffer	PBS
Preservative	0.09% 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
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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
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GENE INFORMATION

Gene Name	GNAT3
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Synonyms	GNAT3, Gustducin, Gustducin alpha-3 chain, GDCA
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Entrez Gene ID	346562
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UniProt ID	A8MTJ3
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