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# Product datasheet

# Anti-GNAT3 antibody ab113664

★★★★★ 1 Abreviews 4 References 画像数1

#### 製品の概要

製品名 Anti-GNAT3 antibody

製品の詳細 Goat polyclonal to GNAT3

由来種 Goat

適用あり: IHC-P アプリケーション 種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat, Horse, Cow, Dog, Pig 4

免疫原 Synthetic peptide:

C-KNQFLDLNLKKEDKE

(with a Cysteine residue linker), corresponding to internal sequence amino acids 304-318 of

Human GNAT3 (NP 001095856.1)

Run BLAST with Run BLAST with

ポジティブ・コントロール

Human Small Intestine

特記事項 The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: Tris buffered saline, 0.5% BSA

精製度 Immunogen affinity purified

ポリモノ ポリクローナル

アイソタイプ ΙgG

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アプリケーション	Abreviews	特記事項
IHC-P		Use a concentration of 3.75 $\mu$ g/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### ターゲット情報

#### 機能

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. Indeed, denatonium and strychnine induce transient reduction in cAMP and cGMP in taste tissue, whereas this decrease is inhibited by GNAT3 antibody. Gustducin heterotrimer transduces response to bitter and sweet compounds via regulation of phosphodiesterase for alpha subunit, as well as via activation of phospholipase C for beta and gamma subunits, with ultimate increase inositol trisphosphate and increase of intracellular Calcium. 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 lumenal sugar sensors in the gut to control the expression of the Na+-glucose transporter SGLT1 in response to dietaty 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.

#### 組織特異性

Expressed in taste buds (sensory organs of clustered epithelial cells) of the circumvallate and foliate papillae of the tongue at protein level. Expressed in enteroendocrine L cells of the gut. Detected also in spermatozoa.

#### 配列類似性

Belongs to the G-alpha family. G(i/o/t/z) subfamily.

#### 翻訳後修飾

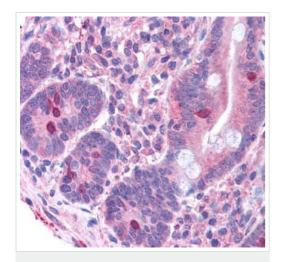
Potential N-myristoylation may anchor alpha-subunit to the inner surface of plasma membrane.

## 細胞内局在

Cytoplasm. Dual ditribution pattern; plasmalemmal pattern with apical region localization and

cytosolic pattern with localization throughout the cytoplasm.

#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GNAT3 antibody (ab113664)

Immunohistochemistry analysis of formalin-Fixed, paraffinembedded Human Small Intestine with ab113664 at 3.75 µg/ml.

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