



## GNAT3 rabbit pAb

|                           |   |
|---------------------------|---|
| <b>Catalog No</b>         | YP-Ab-07939   |
| <b>Isotype</b>            | IgG   |
| <b>Reactivity</b>         | Human; Mouse;Rat  |
| <b>Applications</b>       | WB  |
| <b>Gene Name</b>          | GNAT3   |
| <b>Protein Name</b>       | GNAT3   |
| <b>Immunogen</b>          | Synthesized peptide derived from human GNAT3 AA range: 192-242  |
| <b>Specificity</b>        | This antibody detects endogenous levels of GNAT3 at Human/Mouse/Rat   |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.53% sodium azide.   |
| <b>Source</b>             | Polyclonal, Rabbit,IgG  |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.   |
| <b>Dilution</b>           | WB 1:500-2000   |
| <b>Concentration</b>      | 1 mg/ml   |
| <b>Purity</b>             | ≥90%  |
| <b>Storage Stability</b>  | -20°C/1 year  |
| <b>Synonyms</b>           | Guanine nucleotide-binding protein G(t) subunit alpha-3 (Gustducin alpha-3 chain)   |
| <b>Observed Band</b>      | 38kD  |
| <b>Cell Pathway</b>       | Cytoplasm . Dual distribution pattern; plasmalemmal pattern with apical region localization and cytosolic pattern with localization throughout the cytoplasm.   |
| <b>Tissue Specificity</b> | 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.   |
| <b>Function</b>           | function: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 phosphodiesterase. |

**Background**

Sweet, bitter, and umami tastes are transmitted from taste receptors by a specific guanine nucleotide binding protein. The protein encoded by this gene is the alpha subunit of this heterotrimeric G protein, which is found not only in the oral epithelium but also in gut tissues. Variations in this gene have been linked to metabolic syndrome. [provided by RefSeq, Dec 2015],

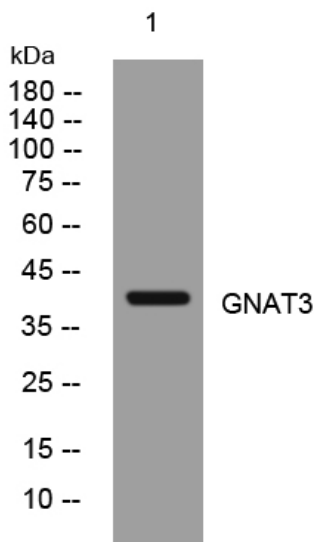
**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western blot analysis of lysates from THP-1 cells, primary antibody was diluted at 1:1000, 4° over night