

Ga olf Polyclonal Antibody

Catalog # AP70276

Specification

Gα olf Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P <u>P38405</u> Human, Mouse, Rat Rabbit Polyclonal

Ga olf Polyclonal Antibody - Additional Information

Gene ID 2774

Other Names GNAL; Guanine nucleotide-binding protein G(olf) subunit alpha; Adenylate cyclase-stimulating G alpha protein; olfactory type

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

Ga olf Polyclonal Antibody - Protein Information

Name GNAL {ECO:0000303|PubMed:23222958, ECO:0000312|HGNC:HGNC:4388}

Function

Guanine nucleotide-binding protein (G protein) involved as transducer in olfactory signal transduction controlled by G protein- coupled receptors (GPCRs) (By similarity). Contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state (By similarity). Signaling by an activated GPCR promotes GDP release and GTP binding (By similarity). The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal (By similarity). Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins (By similarity). GNAL/G(olf) alpha specifically mediates olfactory signal transduction within the olfactory neuroepithelium and the basal ganglia following GPCRs activation (By similarity). Acts by promoting the specific activation of adenylyl cyclase ADCY3, resulting in increased levels of the signaling molecule cAMP (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8CGK7}; Peripheral membrane protein



{ECO:0000250|UniProtKB:Q8CGK7}

Tissue Location

Detected in olfactory neuroepithelium, brain, testis, and to a lower extent in retina, lung alveoli, spleen (PubMed:8243272). Trace amounts where seen in kidney, adrenal gland and liver (PubMed:8243272). Found to be expressed in all the insulinomas examined (PubMed:8243272).

Ga olf Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Ga olf Polyclonal Antibody - Images









Gα olf Polyclonal Antibody - Background

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. G(olf) alpha mediates signal transduction within the olfactory neuroepithelium and the basal ganglia. May be involved in some aspect of visual transduction, and in mediating the effect of one or more hormones/neurotransmitters.