

Gα olf Polyclonal Antibody

Catalog # AP70276

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P38405
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44308

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 IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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}; Cytoplasmic side

{ECO:0000250|UniProtKB:Q8CGK7}. Note=Associated to the plasma membrane via lipid-anchor. {ECO:0000250|UniProtKB:P04896}

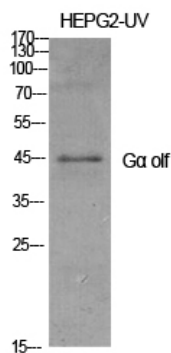
Tissue Location

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).

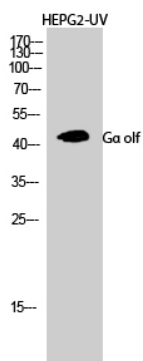
Background

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.

Images



Western Blot analysis of various cells using Ga olf Polyclonal Antibody diluted at 1 : 1000



Western Blot analysis of HEPG2-UV cells using Ga olf Polyclonal Antibody diluted at 1 : 1000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.