

$G_{\alpha s/olf}$ (H-300): sc-28585

BACKGROUND

Heterotrimeric G proteins function to relay information from cell surface receptors to intracellular effectors. Each of a very broad range of receptors specifically detects an extracellular stimulus (a photon, pheromone, odorant, hormone or neurotransmitter) while the effectors (e.g., adenylyl cyclase), which act to generate one or more intracellular messengers, are less numerous. In mammals, G protein α , β and γ polypeptides are encoded by at least 16, 4 and 7 genes, respectively. Most interest in G proteins has been focused on their α subunits, since these proteins bind and hydrolyze GTP and most obviously regulate the activity of the best studied effectors. The G_s subfamily of G_{α} subunits includes two closely related proteins, $G_{\alpha s}$ and $G_{\alpha olf}$, which respectively stimulate adenylyl cyclase and mediate response to olfactory stimuli.

REFERENCES

1. Jones, D.T. and Reed, R.R. 1991. Golf: an olfactory neuron specific G protein involved in odorant signal transduction. *Science* 244: 790-795.
2. Simon, M. I., et al. 1991. Diversity of G proteins in signal transduction. *Science* 252: 802-808.
3. Iñiguez-Lluhi, J.A., et al. 1992. G protein β γ subunits synthesized in Sf9 cells. *J. Biol. Chem.* 267: 23409-23417.
4. Cali, J.J., et al. 1992. Selective tissue distribution of G protein γ subunits, including a new form of the γ subunits identified by cDNA cloning. *J. Biol. Chem.* 267: 24023-24027.
5. McLaughlin, S.K., et al. 1992. Gustducin is a taste-cell-specific G protein closely related to the transducins. *Nature* 357: 563-569.
6. von Weizsäcker, E., et al. 1992. Diversity among the β subunits of heterotrimeric GTP-binding proteins: characterization of a novel β subunit cDNA. *Biochem. Biophys. Res. Commun.* 183: 350-356.

CHROMOSOMAL LOCATION

Genetic locus: GNAS (human) mapping to 20q13.32, GNAL (human) mapping to 18p11.21; Gnas (mouse) mapping to 2 H4, Gnal (mouse) mapping to 18 E1.

SOURCE

$G_{\alpha s/olf}$ (H-300) is a rabbit polyclonal antibody raised against amino acids 82-381 mapping at the C-terminus of $G_{\alpha olf}$ of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

$G_{\alpha s/olf}$ (H-300) is recommended for detection of $G_{\alpha s1-4}$ and $G_{\alpha olf}$ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

$G_{\alpha s/olf}$ (H-300) is also recommended for detection of $G_{\alpha s1-4}$ and $G_{\alpha olf}$ in additional species, including equine, canine, bovine and avian.

Molecular Weight of $G_{\alpha s}$: 52 kDa.

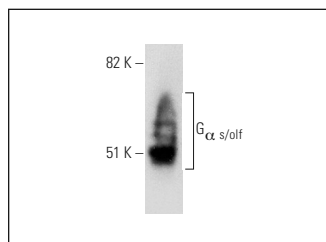
Molecular Weight of $G_{\alpha olf}$: 45 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237, MCF7 whole cell lysate: sc-2206 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



$G_{\alpha s/olf}$ (H-300): sc-28585. Western blot analysis of $G_{\alpha s/olf}$ expression in MCF7 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
Guaranteed

Try $G_{\alpha s/olf}$ (A-5): sc-55545 or $G_{\alpha s/olf}$ (E-7): sc-55546, our highly recommended monoclonal alternatives to $G_{\alpha s/olf}$ (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see $G_{\alpha s/olf}$ (A-5): sc-55545.