

G_{α_s} (K-20): sc-823

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_{α_s} and $G_{\alpha_{olf}}$, which respectively stimulate adenylyl cyclase and mediate response to olfactory stimuli.

CHROMOSOMAL LOCATION

Genetic locus: GNAS (human) mapping to 20q13.32; Gnas (mouse) mapping to 2 H4.

SOURCE

G_{α_s} (K-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the N-terminus of G_{α_s} 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.

Blocking peptide available for competition studies, sc-823 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

G_{α_s} (K-20) is recommended for detection of G_{α_s} 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), immunohistochemistry (including paraffin-embedded sections) (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_{α_s} (K-20) is also recommended for detection of G_{α_s} in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for G_{α_s} siRNA (h): sc-29328, G_{α_s} siRNA (m): sc-41757, G_{α_s} shRNA Plasmid (h): sc-29328-SH, G_{α_s} shRNA Plasmid (m): sc-41757-SH, G_{α_s} shRNA (h) Lentiviral Particles: sc-29328-V and G_{α_s} shRNA (m) Lentiviral Particles: sc-41757-V.

Molecular Weight of G_{α_s} : 49 kDa.

Positive Controls: TT whole cell lysate: sc-364195 or Jurkat whole cell lysate: sc-2204.

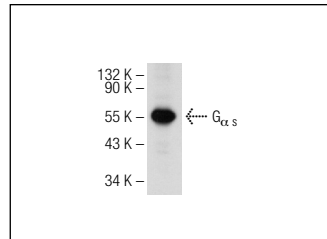
STORAGE

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

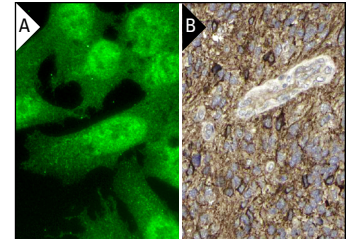
RESEARCH USE

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

DATA



G_{α_s} (K-20): sc-823. Western blot analysis of G_{α_s} expression in TT whole cell lysate.



G_{α_s} (K-20): sc-823. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human malignant glioma tissue showing cytoplasmic and membrane staining of tumor cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

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Try G_{α_s} (12): sc-135914, our highly recommended monoclonal alternatives to G_{α_s} (K-20).