**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 (i.e. adenyl 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. Four distinct classes of Gα subunits have been identified; these include Gαo, Gαq, Gαi3 and Gα12/13. The Gα class comprises all the known α subunits that are susceptible to pertussis toxin modifications, including Gαi-1, Gαi-2, Gαi-3, Gαo, Gαt1, Gαt2, Gαt3 and Gαq,Gαt1. Of these, the three Gαi subtypes function to open atrial potassium channels.

**CHROMOSOMAL LOCATION**

Genetic locus: GNA01 (human) mapping to 16q12.2; Gna01 (mouse) mapping to B57.

**SOURCE**

Gαo (K-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping with a highly divergent domain of Gαo of rat origin.

**PRODUCT**

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

Blocking peptide available for competition studies, sc-387 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Gαo (K-20) is recommended for detection of Gαo of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Gαo (K-20) is also recommended for detection of Gαo in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Gαo siRNA (m): sc-29326, Gαo siRNA (m): sc-37256, Gαo shRNA Plasmid (m): sc-29326-SH, Gαo shRNA (m) Lentiviral Particles: sc-29326-V and Gαo shRNA (m) Lentiviral Particles: sc-37256-V.

Molecular Weight of Gαo: 40 kDa.


**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**

![Western blot analysis of Gαo expression in rat(A) and bovine (B) brain extracts.](image)

![Immunochemical staining of rat (A) and bovine (B) brain extracts.](image)

**SELECT PRODUCT CITATIONS**


**MANUFACTURER**

SANTA CRUZ BIOTECHNOLOGY, INC.

**CONTACT**

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**MONOS Satisfaction Guaranteed**

Try Gαo (A2): sc-13532 or Gαo (E-1): sc-393874, our highly recommended monoclonal alternatives to Gαo (K-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see Gαo (A2): sc-13532.