**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 Gαi1, Gαi2, Gαi3, Gαo, and Gα12/13. The Gα class comprises all the known α subunits that are susceptible to pertussis toxin modifications, including Gαtx1-7, Gαt1-2, Gαt3-5, Gαt6, Gαt7-9, Gαt12, Gαt13 and Gαt17. Of these, the three Gα1 subtypes function to open atrial potassium channels.

**REFERENCES**


**SOURCE**

Gαi1-1 (I-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping with in a highly divergent domain of Gαi1-1 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-391 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-391 AC, 500 µg/ing dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting of Gαi peptide mapping with in a highly divergent domain of Gαi and 0.1% gelatin. Blocking peptide available for competition studies, sc-391 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Gαi1-1 (I-20) is recommended for detection of Gαi1 and, to a lesser extent, Gαi2 and Gαi3 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).

Gαi1-1 (I-20) is also recommended for detection of Gαi1 and, to a lesser extent, Gαi2 and Gαi3 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of Gαi1: 41 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, rat brain extract: sc-2392 or mouse brain extract: sc-2253.

**STORAGE**

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

**DATA**


**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**TRY Gαi1 (R4): sc-13533, our highly recommended monocolonal alternative to Gαi1. Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see Gαi1 (R4): sc-13533.**