

G_{αz} (I-20): sc-388

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., 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. Four distinct classes of G_α subunits have been identified; these include G_s, G_i, G_q and G_{α12/13}. The G_i class comprises all the known α subunits that are susceptible to pertussis toxin modifications, including G_{αi-1}, G_{αi-2}, G_{αi-3}, G_{αo}, G_{αt1}, G_{αt2}, G_{αz} and G_{αgust}. Of these, the three G_{αi} subtypes function to open atrial potassium channels.

CHROMOSOMAL LOCATION

Genetic locus: GNAZ (human) mapping to 22q11.22; Gnaz (mouse) mapping to 10 B5.3.

SOURCE

G_{αz} (I-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a highly divergent domain of G_{αz} of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-388 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

G_{αz} (I-20) is recommended for detection of G_{αz} of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μg per 1 × 10⁶ cells).

G_{αz} (I-20) is also recommended for detection of G_{αz} in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for G_{αz} siRNA (h): sc-41760, G_{αz} siRNA (m): sc-41761, G_{αz} shRNA Plasmid (h): sc-41760-SH, G_{αz} shRNA Plasmid (m): sc-41761-SH, G_{αz} shRNA (h) Lentiviral Particles: sc-41760-V and G_{αz} shRNA (m) Lentiviral Particles: sc-41761-V.

Positive Controls: G_{αz} (h4): 293T Lysate: sc-170076 or HeLa whole cell lysate: sc-2200.

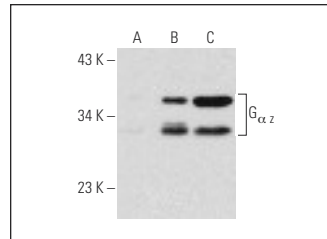
STORAGE

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_{αz} (I-20): sc-388. Western blot analysis of G_{αz} expression in non-transfected 293T: sc-117752 (A), human G_{αz} transfected 293T: sc-170076 (B) and HeLa (C) whole cell lysates.

SELECT PRODUCT CITATIONS

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