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. 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 Gq, G11, G12/13- and the Gq class includes Gα15, Gα16, Gα11 and Gα12, two of which, Gα11 and Gα12/13, are abundant in brain and lung and present at lower levels in a variety of tissues.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: GNAQ (human) mapping to 9q21; Gnaq (mouse) mapping to 19 A.

SOURCE
Gαq (E-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the N-terminus of Gαq of mouse 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-393 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
Gαq (E-17) is recommended for detection of Gαq of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with Gα11.

Suitable for use as control antibody for Gαq siRNA (h): sc-35429 and Gαq siRNA (m): sc-35430.

Molecular Weight of Gαq: 45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 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.

SELECT PRODUCT CITATIONS