



## $G_{\alpha 16}$ (C-18): sc-7415

### BACKGROUND

Heterotrimeric G proteins function to relay information from cell surface receptors to intracellular effectors (1). 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  $\alpha$ ,  $\beta$  and  $\gamma$  polypeptides are encoded by at least 16, 4 and 7 genes, respectively (2-5). Most interest in G proteins has been focused on their  $\alpha$  subunits, since these proteins bind and hydrolyze GTP and most obviously regulate the activity of the best studied effectors. Four distinct classes of  $G_{\alpha}$  subunits have been identified; these include  $G_s$ ,  $G_i$ ,  $G_{12/13}$  (3,4). The  $G_i$  class comprises all the known  $\alpha$  subunits that are susceptible to pertussis toxin modifications, including  $G_{\alpha i-1}$ ,  $G_{\alpha i-2}$ ,  $G_{\alpha i-3}$ ,  $G_{\alpha o}$ ,  $G_{\alpha t1}$ ,  $G_{\alpha t2}$ ,  $G_{\alpha z}$  and  $G_{\alpha gust}$  (4). Of these, the three  $G_{\alpha i}$  subtypes function to open atrial potassium channels (6).  $G_{\alpha 16}$  is a member of the  $G_q$  subfamily and is expressed specifically in hematopoietic cells (7).

### SOURCE

$G_{\alpha 16}$  (C-18) is an affinity-purified goat polyclonal antibody mapping at the carboxy terminus of  $G_{\alpha 16}$  of human origin (identical to corresponding mouse sequence).

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS containing 0.1% sodium azide and 0.2% gelatin.

Blocking peptide is available for competition studies (sc-7415 P) (100  $\mu$ g peptide in 0.5 ml PBS with 0.1% sodium azide and 100  $\mu$ g BSA).

### SPECIFICITY

$G_{\alpha 16}$  (C-18) reacts with  $G_{\alpha 16}$  and  $G_{\alpha 15}$  of mouse, rat and human origin by Western blotting and immunohistochemistry.

Recommended dilution range for Western blot analysis: 1:100–1:1000. Recommended starting dilution: 1:100.

### STORAGE

Store at 4° C, do not freeze; stable for one year from the date of shipment.

### RESEARCH USE

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

### REFERENCES

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