

# G<sub>γ</sub> 2 (E-13): sc-26777

## 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 (i.e. a photon, pheromone, odorant, hormone or neurotransmitter), while the effectors (e.g. 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. 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. Evidence, however, has established an important regulatory role for the  $\beta\gamma$  subunits. It is becoming increasingly clear that different G protein complexes expressed in different tissues carry structurally distinct members of the  $\gamma$  as well as the  $\alpha$  and  $\beta$  subunits, and that preferential associations between members of subunit families increase G protein functional diversity.

## REFERENCES

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- Simon, M.I., et al. 1991. Diversity of G proteins in signal transduction. *Science* 252: 802-808.
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## CHROMOSOMAL LOCATION

Genetic locus: GNG2 (human) mapping to 14q21; Gng2 (mouse) mapping to 14 A2.

## SOURCE

G<sub>γ</sub> 2 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of G<sub>γ</sub> 2 of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-26777 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

G<sub>γ</sub> 2 (E-13) is recommended for detection of G<sub>γ</sub> 2 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).

Suitable for use as control antibody for G<sub>γ</sub> 2 siRNA (h): sc-41774, G<sub>γ</sub> 2 siRNA (m): sc-41775, G<sub>γ</sub> 2 shRNA Plasmid (h): sc-41774-SH, G<sub>γ</sub> 2 shRNA Plasmid (m): sc-41775-SH, G<sub>γ</sub> 2 shRNA (h) Lentiviral Particles: sc-41774-V and G<sub>γ</sub> 2 shRNA (m) Lentiviral Particles: sc-41775-V.

Molecular Weight of G<sub>γ</sub> 2: 3-8 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try G<sub>γ</sub> 2/3/4/7 (C-5): sc-166419 or G<sub>γ</sub> 2 (7-RE20): sc-134344, our highly recommended monoclonal alternatives to G<sub>γ</sub> 2 (E-13).