SANTA CRUZ BIOTECHNOLOGY, INC.

$G_{\gamma\ 2/3/4/7}$ (FL-71): sc-28589

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (α 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. 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 γ as well as the α and β subunits and that preferential associations between members of subunit families increase G protein functional diversity.

REFERENCES

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5. Blank, J.L., Brattain, K.A. and Exton, J.H. 1992. Activation of cytosolic phosphoinositide phospholipase C by G-protein $\beta\gamma$ subunits. J. Biol. Chem. 267: 23069-23075.
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SOURCE

$G_{\gamma\ 2/3/4/7}$ (FL-71) is a rabbit polyclonal antibody raised against amino acids 1-71 representing full length $G_{\gamma\ 2}$ of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

$G_{\gamma\ 2/3/4/7}$ (FL-71) is recommended for detection of $G_{\gamma\ 2}$, $G_{\gamma\ 3}$, $G_{\gamma\ 4}$ and $G_{\gamma\ 7}$ 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); partially cross reactive with other G_{γ} proteins.

$G_{\gamma\ 2/3/4/7}$ (FL-71) is also recommended for detection of $G_{\gamma\ 2}$, $G_{\gamma\ 3}$, $G_{\gamma\ 4}$ and $G_{\gamma\ 7}$ in additional species, including equine, canine, bovine, porcine and avian.

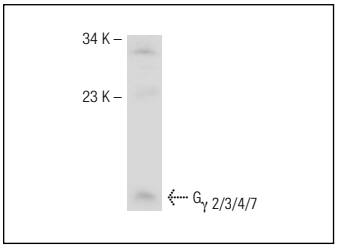
Molecular Weight of $G_{\gamma\ 2/3/4/7}$: 8 kDa.

Positive Controls: mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



$G_{\gamma\ 2/3/4/7}$ (FL-71): sc-28589. Western blot analysis of $G_{\gamma\ 2/3/4/7}$ expression in mouse brain tissue extract.

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.

MONOS Satisfaction Guaranteed

Try **$G_{\gamma\ 2/3/4/7}$ (C-5): sc-166419**, our highly recommended monoclonal alternative to $G_{\gamma\ 2/3/4/7}$ (FL-71).