

GGTase-II β (H-200): sc-98938

BACKGROUND

Eukaryotic cells contain three distinct prenyltransferases that catalyze the attachment of a thioether-linked 15-carbon farnesyl group or 20-carbon geranylgeranyl group to C-terminal cysteine residues. Geranylgeranyltransferase type I (GGTase-I, PGGTase-I) catalyzes the nucleophilic substitution reaction between geranylgeranyl diphosphate (GGPP) and a protein-derived thiol to form the thioether linkage. The candidate protein contains a C-terminal CAAX motif in which "A" is an aliphatic amino acid and "X" is leucine. Geranylgeranylation is necessary for the TGF β 1 signaling pathway, which involves phosphatidylcholine-specific phospholipase and a protein kinase C. Human GGTase-I contains an α subunit and a β subunit. Geranylgeranyl-transferase type II (GGTase-II) is a heterodimer that catalyzes the transfer of two 20-carbon geranylgeranyl groups from geranylgeranyl pyrophosphate onto C-terminal cysteine residues of Rab GTPases, which is required for the activity of Rab proteins. GGTase-II also contains an α subunit and a β subunit.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RABGGTB (human) mapping to 1p31.1; Rabggtb (mouse) mapping to 3 H3.

RESEARCH USE

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

SOURCE

GGTase-II β (H-200) is a rabbit polyclonal antibody raised against amino acids 139-331 mapping at the C-terminus of GGTase-II β of human origin.

PRODUCT

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

APPLICATIONS

GGTase-II β (H-200) is recommended for detection of GGTase-II β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

GGTase-II β (H-200) is also recommended for detection of GGTase-II β in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for GGTase-II β siRNA (h): sc-45437, GGTase-II β siRNA (m): sc-45438, GGTase-II β shRNA Plasmid (h): sc-45437-SH, GGTase-II β shRNA Plasmid (m): sc-45438-SH, GGTase-II β shRNA (h) Lentiviral Particles: sc-45437-V and GGTase-II β shRNA (m) Lentiviral Particles: sc-45438-V

Molecular Weight of GGTase-II β : 37 kDa.

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.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


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Try **GGTase-II β (B-8): sc-365926** or **GGTase-II β (B-12): sc-365901**, our highly recommended monoclonal alternatives to GGTase-II β (H-200).