**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. adenylcyclase), 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. Four distinct classes of G $\alpha$ subunit have been identified; these include Gs, Gi, Gq and G$\alpha_{12/13}$. Gustducin has been identified as a taste-cell-specific G protein within the G$\gamma$ subclass of G$\alpha$ subunit proteins that is most closely related to the transducins and exclusively expressed in taste buds.

**CHROMOSOMAL LOCATION**

Genetic locus: Gnat3 (mouse) mapping to 5 A3.

**SOURCE**

G$\alpha_{gust}$ (I-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a highly divergent domain of G$\alpha_{gust}$ of rat origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-395 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

G$\alpha_{gust}$ (I-20) is recommended for detection of G$\alpha_{gust}$ of mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (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$\alpha_{gust}$ siRNA (m): sc-41749, G$\alpha_{gust}$ shRNA Plasmid (m): sc-41749-SH and G$\alpha_{gust}$ shRNA (m) Lentiviral Particles: sc-41749-V.

Positive Controls: mouse brain extract : sc-2253 or mouse small intestine extract: sc-364252.

**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.

**BACKGROUND**

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

**DATA**

55K– 43K– 34K–

**SELECT PRODUCT CITATIONS**