

GRIN1 (S-13): sc-162904

BACKGROUND

G protein-coupled receptors (GPCRs) represent a large superfamily of cell-surface receptors that are involved in a multitude of physiological processes such as perception of sensory information, modulation of synaptic transmission, hormone release/actions, regulation of cell contraction/migration and cell growth/differentiation. GPCRs interact with G proteins (heterotrimeric GTPases) to synthesize intracellular second messengers, such as diacylglycerol, cyclic AMP, inositol phosphates and calcium ions. Their diverse biological functions range from vision and olfaction to neuronal and endocrine signaling and are involved in many pathological conditions. GRIN1 (G protein regulated inducer of neurite outgrowth 1), also known as GPRIN1, is a 1,008 amino acid cell membrane protein that is widely expressed in the central nervous system, with highest levels in spinal cord. GRIN1 interacts with activated forms of G_{α_i} , G_{α_o} and G_{α_z} and may be involved in neurite outgrowth.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: GPRIN1 (human) mapping to 5q35.2; Gprin1 (mouse) mapping to 13 B1.

SOURCE

GRIN1 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GRIN1 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.

Blocking peptide available for competition studies, sc-162904 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GRIN1 (S-13) is recommended for detection of GRIN1 isoform 1 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); non cross-reactive with isoform GRIN1-2; non cross-reactive with GRIN2 or GRIN3 .

Suitable for use as control antibody for GRIN1 siRNA (h): sc-91941, GRIN1 siRNA (m): sc-145765, GRIN1 shRNA Plasmid (h): sc-91941-SH, GRIN1 shRNA Plasmid (m): sc-145765-SH, GRIN1 shRNA (h) Lentiviral Particles: sc-91941-V and GRIN1 shRNA (m) Lentiviral Particles: sc-145765-V.

Molecular Weight of GRIN1: 110 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.

PROTOCOLS

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