

AGS3 (R-125): sc-33222

BACKGROUND

Activators of G protein-signaling (AGS) are non-G protein-coupled receptor (GPCR)-ligand-induced initiators of heterotrimeric G protein-signaling pathways that function either downstream of GPCR effectors or at the level of heterotrimeric G proteins. AGS3 is a G_{α_i} -binding protein that is capable of displacing $G_{\beta\gamma}$ and associating with G_{α_i} -GDP, thereby stabilizing the GDP-bound conformation of G_{α_i} . AGS3 localizes to the cytoplasm and is expressed in rat brain, PC12 cells, NG108-15 cells and DDT(1)-MF2 smooth muscle cells. In rat, a 227 amino acid long form of AGS3 that contains 7 TPR (tetratricopeptide repeat) domains which target proteins to subcellular regions of neuroblasts is more prevalent in adult rat brain, whereas the 166 amino acid short form of AGS3 is more prevalent in adult rat heart.

REFERENCES

1. Takesono, A., et al. 1999. Receptor-independent activators of heterotrimeric G protein-signaling pathways. *J. Biol. Chem.* 274: 33202-33205.
2. Natochin, M., et al. 2000. AGS3 inhibits GDP dissociation from G_{α_i} subunits of the G_i family and rhodopsin-dependent activation of transducin. *J. Biol. Chem.* 275: 40981-40985.

CHROMOSOMAL LOCATION

Genetic locus: GPSM1 (human) mapping to 9q34.3; Gpsm1 (mouse) mapping to 2A3.

SOURCE

AGS3 (R-125) is a rabbit polyclonal antibody raised against amino acids 346-470 mapping within an internal region of AGS3 of rat 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

AGS3 (R-125) is recommended for detection of AGS3 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).

AGS3 (R-125) is also recommended for detection of AGS3 in additional species, including bovine.

Suitable for use as control antibody for AGS3 siRNA (h): sc-44441, AGS3 siRNA (m): sc-41693, AGS3 shRNA Plasmid (h): sc-44441-SH, AGS3 shRNA Plasmid (m): sc-41693-SH, AGS3 shRNA (h) Lentiviral Particles: sc-44441-V and AGS3 shRNA (m) Lentiviral Particles: sc-41693-V.

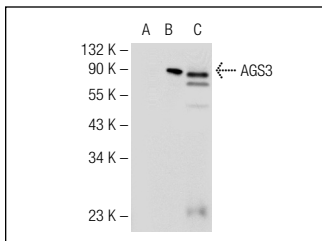
Molecular Weight of AGS3: 75 kDa.

Positive Controls: rat brain extract: sc-2392, AGS3 (m2): 293T Lysate: sc-126400 or PC-12 cell lysate: sc-2250.

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



AGS3 (R-125): sc-33222. Western blot analysis of AGS3 expression in non-transfected: sc-117752 (A) and mouse AGS3 transfected: sc-126400 (B) 293T whole cell lysates and rat brain tissue extract (C).

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **AGS3 (G-2): sc-271721** or **AGS3 (12): sc-136482**, our highly recommended monoclonal alternatives to AGS3 (R-125).