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AGS3 shRNA (h) Lentiviral Particles: sc-44441-V

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 $G_{\alpha i}$ -binding protein that is capable of displacing $G_{\beta\gamma}$ and associating with G_{α} -GDP, thereby stabilizing the GDP-bound conformation of G_{α} . AGS3 localizes to the cytoplasm and is expressed in rat brain, PC12 cells, NG108-15 cells and DDT₁-MF2 smooth muscle cells. In rat, a 227-amino acid long form of AGS3 that contains seven 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} subunits of the G_i family and rhodopsin-dependent activation of transducin. *J. Biol. Chem.* 275: 40981-40985.
3. De Vries, L., et al. 2000. Activator of G protein signaling 3 is a guanine dissociation inhibitor for $G_{\alpha i}$ subunits. *Proc. Natl. Acad. Sci. USA* 97: 14364-14369.
4. Bernard, M.L., et al. 2001. Selective interaction of AGS3 with G proteins and the influence of AGS3 on the activation state of G proteins. *J. Biol. Chem.* 276: 1585-1593.
5. Pizzinat, N., et al. 2001. Identification of a truncated form of the G protein regulator AGS3 in heart that lacks the tetratricopeptide repeat domains. *J. Biol. Chem.* 276: 16601-16610.
6. Cismowski, M.J., et al. 2001. Receptor-independent activators of heterotrimeric G proteins. *Life Sci.* 68: 2301-2308.

CHROMOSOMAL LOCATION

Genetic locus: GPSM1 (human) mapping to 9q34.3.

PRODUCT

AGS3 shRNA (h) Lentiviral Particles is a pool of concentrated, transduction-ready viral particles containing 3 target-specific constructs that encode 19-25 nt (plus hairpin) shRNA designed to knock down gene expression. Each vial contains 200 μ l frozen stock containing 1.0×10^6 infectious units of virus (IFU) in Dulbecco's Modified Eagle's Medium with 25 mM HEPES pH 7.3. Suitable for 10-20 transductions. Also see AGS3 siRNA (h): sc-44441 and AGS3 shRNA Plasmid (h): sc-44441-SH as alternate gene silencing products.

STORAGE

Store lentiviral particles at -80° C. Stable for at least one year from the date of shipment. Once thawed, particles can be stored at 4° C for up to one week. Avoid repeated freeze thaw cycles.

APPLICATIONS

AGS3 shRNA (h) Lentiviral Particles is recommended for the inhibition of AGS3 expression in human cells.

SUPPORT REAGENTS

Control shRNA Lentiviral Particles: sc-108080. Available as 200 μ l frozen viral stock containing 1.0×10^6 infectious units of virus (IFU); contains an shRNA construct encoding a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA.

GENE EXPRESSION MONITORING

AGS3 (G-2): sc-271721 is recommended as a control antibody for monitoring of AGS3 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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 goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor AGS3 gene expression knockdown using RT-PCR Primer: AGS3 (h)-PR: sc-44441-PR (20 μ l, 466 bp). Annealing temperature for the primers should be $55-60^{\circ}$ C and the extension temperature should be $68-72^{\circ}$ C.

BIOSAFETY

Lentiviral particles can be employed in standard Biosafety Level 2 tissue culture facilities (and should be treated with the same level of caution as with any other potentially infectious reagent). Lentiviral particles are replication-incompetent and are designed to self-inactivate after transduction and integration of shRNA constructs into genomic DNA of target cells.

RESEARCH USE

The purchase of this product conveys to the buyer the nontransferable right to use the purchased amount of the product and all replicates and derivatives for research purposes conducted by the buyer in his laboratory only (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party, or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes.

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