**APPLICATIONS**

mGluR-1a/b shRNA (m) Lentiviral Particles is recommended for the inhibition of mGluR-1 expression in mouse cells.

**SUPPORT REAGENTS**

Control shRNA Lentiviral Particles: sc-108080. Available as 200 µl frozen viral stock containing 1.0 x 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.

**RT-PCR REAGENTS**

Semi-quantitative RT-PCR may be performed to monitor mGluR-1 gene expression knockdown using RT-PCR Primer: mGluR-1a/b (m)-PR: sc-61027-PR (20 µl). Annealing temperature for the primers should be 55-60°C and the extension temperature should be 68-72°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 for Commercial Purposes.

**BACKGROUND**

The mGluR proteins (metabotropic glutamate receptors) are members of the G-protein-coupled receptor family and are functionally and pharmacologically distinct from the GluR proteins (ionotropic glutamate receptors). The eight currently known mGluR proteins are mediated by two G-proteins with opposing regulation of adenylyl cyclase pathways. The activities of mGluR1 and mGluR5 are mediated by a G-protein that activates a phosphatidylinositol-calcium second messenger system and generates a calcium-activated chloride current. The remainder of the eight sub-types of mGluR have an activity mediated by a G-protein that inhibits adenylyl cyclase activity. mGluR-1, which can form a homodimer acts as a receptor for glutamate. It may also be involved in glutamate activity in the CNS.

**REFERENCES**


**PRODUCT**

mGluR-1a/b shRNA (m) 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 µl frozen stock containing 1.0 x 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 mGluR-1a/b siRNA (m): sc-61027 and mGluR-1a/b shRNA Plasmid (m): sc-61027-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.

**PROTOCOLS**

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