SANTA CRUZ BIOTECHNOLOGY, INC.

MAGE-G2 shRNA (m) Lentiviral Particles: sc-149224-V

BACKGROUND

MAGE-G2, also known as 1700020D05Rik, is a 294 amino acid mouse protein encoded by a gene that maps to mouse chromosome 19 A. MAGE-G2 is highly homologous to MAGE-G1 and may possess similar characteristics to those of necdin. While it is expressed in postmitotic neurons, necdin acts as a growth suppressor. It has been suggested that necdin and MAGE-G1 share common biochemical and functional features, and both are thought to act together in brain development. Necdin-homologous proteins, such as MAGE-G1 and MAGE-G2, may compensate for the absence of necdin expression in Prader-Willi syndrome and necdin knockout mice.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: Scarb1 (mouse) mapping to 5 G1.1.

PRODUCT

MAGE-G2 shRNA (m) Lentiviral Particles are concentrated, transduction-ready viral particles containing a target-specific construct that encodes a 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 MAGE-G2 siRNA (m): sc-149224 and MAGE-G2 shRNA Plasmid (m): sc-149224-SH as alternate gene silencing products.

STORAGE

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

APPLICATIONS

MAGE-G2 shRNA (m) Lentiviral Particles is recommended for the inhibition of MAGE-G2 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 MAGE-G2 gene expression knockdown using RT-PCR Primer: MAGE-G2 (m)-PR: sc-149224-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-competent 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.

PROTOCOLS

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