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SANTA CRUZ BIOTECHNOLOGY, INC.

EBP2 shRNA (h) Lentiviral Particles: sc-45622-V

BACKGROUND

The replication and stable maintenance of latent Epstein-Barr virus DNA episomes in human cells requires only one viral protein, Epstein-Barr nuclear antigen 1 (EBNA1). EBNA1 binding protein 2, also designated p40/EBP2, is a nuclear protein required for the processing of the 27S pre-rRNA. EBP2 is highly conserved across species and is ubiquitously expressed in human tissues, especially myelogenous leukemia K-562. EBP2 specifically interacts with EBNA1, supporting the long-term maintenance of Epstein-Barr virus plasmids in human cells. The EBNA1-EBP2 complex is important for the stable segregation of Epstein-Barr virus episomes during cell division.

REFERENCES

1. Shire, K., et al. 1999. EBP2, a human protein that interacts with sequences of the Epstein-Barr virus nuclear antigen 1 important for plasmid maintenance. J. Virol. 73: 2587-2595.
2. Henning, D., et al. 2001. Expression of p40/Epstein-Barr virus nuclear antigen 1 binding protein 2. Biochem. Biophys. Res. Commun. 283: 430-436.
3. Narum, D.L., et al. 2002. A novel Plasmodium falciparum erythrocyte binding protein-2 (EBP2/BAEBL) involved in erythrocyte receptor binding. Mol. Biochem. Parasitol. 119: 159-168.
4. Kapoor, P. 2003. EBNA1 partitions Epstein-Barr virus plasmids in yeast cells by attaching to human EBNA1-binding protein 2 on mitotic chromosomes. J. Virol. 77: 6946-6956.
5. Sears, J. 2004. The amino terminus of Epstein-Barr Virus (EBV) nuclear antigen 1 contains AT hooks that facilitate the replication and partitioning of latent EBV genomes by tethering them to cellular chromosomes. J. Virol. 78: 11487-11505.
6. Habel, M.E., et al. 2004. Maintenance of Epstein-Barr virus-derived episomal vectors in the murine Sp2/0 myeloma cell line is dependent upon exogenous expression of human EBP2. Biochem. Cell Biol. 82: 375-380.
7. Fu, Y., et al. 2005. Adiponectin promotes adipocyte differentiation, Insulin sensitivity, and lipid accumulation. J. Lipid Res. 46:1369-1379.

CHROMOSOMAL LOCATION

Genetic locus: EBNA1BP2 (human) mapping to 1p34.2.

PRODUCT

EBP2 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 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 EBP2 siRNA (h): sc-45622 and EBP2 shRNA Plasmid (h): sc-45622-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

EBP2 shRNA (h) Lentiviral Particles is recommended for the inhibition of EBP2 expression in human 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.

GENE EXPRESSION MONITORING

EBP2 (C-12): sc-46314 is recommended as a control antibody for monitoring of EBP2 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 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor EBP2 gene expression knockdown using RT-PCR Primer: EBP2 (h)-PR: sc-45622-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 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 or our catalog for detailed protocols and support products.