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ATF-6 α shRNA (m) Lentiviral Particles: sc-45950-V

BACKGROUND

ATF-6 is a member of the basic-leucine zipper family of transcription factors. Endoplasmic reticulum stress causes cleavage of transmembrane ATF-6 and translocation of active ATF-6 to the nucleus. Soluble ATF-6 can exist as either an ATF-6 β homodimer or an ATF-6 α / β heterodimer. Binding of the ATF-6 β homodimer or ATF-6 α / β heterodimer to the nuclear transcription factor YC (NF-YC) induces ER chaperone transcription.

REFERENCES

- Hai, T.W., et al. 1989. Transcription factor ATF cDNA clones: an extensive family of leucine zipper proteins able to selectively form DNA-binding heterodimers. *Genes Dev.* 3: 2083-2090.
- Zhu, C., et al. 1997. Interaction of ATF6 and serum response factor. *Mol. Cell. Biol.* 17: 4957-4966.
- Wang, Y., et al. 2000. Activation of ATF6 and an ATF6 DNA binding site by the endoplasmic reticulum stress response. *J. Biol. Chem.* 275: 27013-27020.
- Yoshida, H., et al. 2000. ATF6 activated by proteolysis binds in the presence of NF-Y (CBF) directly to the cis-acting element responsible for the mammalian unfolded protein response. *Mol. Cell. Biol.* 20: 6755-6767.
- Urano, F., et al. 2000. IRE1 and efferent signaling from the endoplasmic reticulum. *J. Cell Sci.* 113: 3697-3702.
- Li, M., et al. 2000. ATF6 as a transcription activator of the endoplasmic reticulum stress element: thapsigargin stress-induced changes and synergistic interactions with NF-Y and YY1. *Mol. Cell. Biol.* 20: 5096-5106.

CHROMOSOMAL LOCATION

Genetic locus: *Atf6* (mouse) mapping to 1 H3.

PRODUCT

ATF-6 α 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 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 ATF-6 α siRNA (m): sc-45950 and ATF-6 α shRNA Plasmid (m): sc-45950-SH as alternate gene silencing products.

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.

APPLICATIONS

ATF-6 α shRNA (m) Lentiviral Particles is recommended for the inhibition of ATF-6 α expression in mouse 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

ATF-6 α (F-7): sc-166659 is recommended as a control antibody for monitoring of ATF-6 α 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 ATF-6 α gene expression knockdown using RT-PCR Primer: ATF-6 α (m)-PR: sc-45950-PR (20 μ l, 580 bp). 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.

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