

AP-2 ϵ siRNA (m): sc-141134

BACKGROUND

AP-2 transcription factor family members include AP-2 α , AP-2 β , AP-2 γ , AP-2 δ and AP-2 ϵ , which specifically bind to DNA and regulate transcription of selected genes. AP-2 proteins contain a helix-span-helix motif at their C-terminus and a basic central region that, together, mediate DNA binding and dimerization. AP-2 family members have various roles in apoptosis, development, morphogenesis and cell-cycle control. AP-2 ϵ , also known as TFAP2E or AP2E, is a nuclear protein and is predominantly expressed in skin, HeLa cells, primary keratinocytes and immortalized keratinocytes. AP-2 ϵ binds to DNA as a dimer, associated either as a homodimer or as a heterodimer with other members of the AP-2 family. Due to its high level of expression in skin, AP-2 ϵ is believed to play an important role in skin biology.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Tcfap2e (mouse) mapping to 4 D2.2.

PRODUCT

AP-2 ϵ siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see AP-2 ϵ shRNA Plasmid (m): sc-141134-SH and AP-2 ϵ shRNA (m) Lentiviral Particles: sc-141134-V as alternate gene silencing products.

PROTOCOLS

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

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

AP-2 ϵ siRNA (m) is recommended for the inhibition of AP-2 ϵ expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor AP-2 ϵ gene expression knockdown using RT-PCR Primer: AP-2 ϵ (m)-PR: sc-141134-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.