

EID-3 siRNA (m): sc-144608

BACKGROUND

EID-3 (EP300-interacting inhibitor of differentiation 3), also known as E1A-like inhibitor of differentiation 3, is a 333 amino acid protein belonging to the NSE4 family. Localizing to nucleus and cytoplasm, EID-3 is highly expressed in testis. EID-3 may interfere with CBP-dependent coactivation by acting as a repressor of nuclear receptor-dependent transcription, and may act as a coinhibitor to other CBP/p300 dependent transcription factors. EID-3 exists as a homodimer or heterodimer with EID-2, and is encoded by a gene that maps to human chromosome 12q23.3. Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12 including hypochondrogenesis, achondrogenesis and Kniest dysplasia.

REFERENCES

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3. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
4. Zumkeller, W., et al. 2004. Genotype/phenotype analysis in a patient with pure and complete trisomy 12p. *Am. J. Med. Genet. A* 129A: 261-264.
5. Sasajima, Y., et al. 2005. A novel EID family member, EID-3, inhibits differentiation and forms a homodimer or heterodimer with EID-2. *Biochem. Biophys. Res. Commun.* 333: 969-975.
6. Nishimura, G., et al. 2005. The phenotypic spectrum of COL2A1 mutations. *Hum. Mutat.* 26: 36-43.
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CHROMOSOMAL LOCATION

Genetic locus: Eid3 (mouse) mapping to 10 C1.

PRODUCT

EID-3 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs 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 EID-3 shRNA Plasmid (m): sc-144608-SH and EID-3 shRNA (m) Lentiviral Particles: sc-144608-V as alternate gene silencing products.

For independent verification of EID-3 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-144608A, sc-144608B and sc-144608C.

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

EID-3 siRNA (m) is recommended for the inhibition of EID-3 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 EID-3 gene expression knockdown using RT-PCR Primer: EID-3 (m)-PR: sc-144608-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.