SANTA CRUZ BIOTECHNOLOGY, INC.

# ENY2 siRNA (m): sc-144900

## BACKGROUND

ENY2 (enhancer of yellow 2 transcription factor homolog) is a 101 amino acid nuclear protein that is a component of the acetylation complex SAGA and belongs to the ENY2 family. The SAGA complex is composed of several proteins, which together activate transcription by remodeling chromatin and regulating histone deubiquitination and acetylation. As a component of the SAGA complex, ENY2 is involved in a subcomplex that deubiquitinates histones H2A and H2B. The entire SAGA complex is directed to specific gene promoters where it is required for transcription. ENY2 is required for nuclear receptor-mediated transactivation. In addition, ENY2 may also be involved in mRNA export as well as accurate chromatin positioning in the nucleous. ENY2 is thought to tether genes into the nuclear periphery. The gene encoding ENY2 maps to human chromosome 8.

## REFERENCES


1. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. Biochem. Biophys. Res. Commun. 289: 111-115.
2. Georgieva, S., et al. 2001. The novel transcription factor e(y)2 interacts with TAF(II)40 and potentiates transcription activation on chromatin templates. Mol. Cell. Biol. 21: 5223-5231.
3. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. Hum. Genet. 110: 64-67.
4. McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.
5. Mossafa, H., et al. 2006. Non-Hodgkin's lymphomas with Burkitt-like cells are associated with c-Myc amplification and poor prognosis. Leuk. Lymphoma 47: 1885-1893.
6. Agrelo, R., et al. 2006. Epigenetic inactivation of the premature aging Werner syndrome gene in human cancer. Proc. Natl. Acad. Sci. USA 103: 8822-8827.
7. Zhao, Y., et al. 2008. A TFTC/STAGA module mediates histone H2A and H2B deubiquitination, coactivates nuclear receptors, and counteracts heterochromatin silencing. Mol. Cell 29: 92-101.


## CHROMOSOMAL LOCATION

Genetic locus: Eny2 (mouse) mapping to 15 B3.2.

## PRODUCT

ENY2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ENY2 shRNA Plasmid (m): sc-144900-SH and ENY2 shRNA (m) Lentiviral Particles: sc-144900-V as alternate gene silencing products.

For independent verification of ENY2 (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-144900A, sc-144900B and sc-144900C.

## 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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

ENY2 siRNA (m) is recommended for the inhibition of ENY2 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 µM in 66 µl. 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 ENY2 gene expression knockdown using RT-PCR Primer: ENY2 (m)-PR: sc-144900-PR (20 µl). 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.

## PROTOCOLS

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