SANTA CRUZ BIOTECHNOLOGY, INC.

# ASXL3 siRNA (m): sc-141312

## BACKGROUND

Polycomb group (PcG) proteins form multiprotein complexes necessary for sustaining the transcriptionally repressive state of homeotic genes during development, although they are not necessary for repression initiation. ASXL3 (additional sex combs like 3), also known as putative Polycomb group protein ASXL3, is a 2,248 amino acid protein that belongs to the Asx family. Encoded by a gene that maps to human chromosome 18q12.1, ASXL3 contains three LRR (leucine-rich repeats) and one PHD-type zinc finger. ASXL3 exists as three alternatively spliced isoforms and is conserved in chimpanzee, canine, bovine, rat and chicken. Localizing to nucleus, ASXL3 is expressed in pancreatic islet, testis, neuroblastoma and head and neck tumors. ASXL3 is a cancer-associated gene and deletions of ASXL3 occur in myelodysplastic syndromes.

## REFERENCES


1. Fisher, C.L., et al. 2006. Characterization of ASXL1, a murine homolog of additional sex combs, and analysis of the Asx-like gene family. Gene 369: 109-118.
2. Cho, Y.S., et al. 2006. Additional sex comb-like 1 (ASXL1), in cooperation with SRC-1, acts as a ligand-dependent coactivator for retinoic acid receptor. J. Biol. Chem. 281: 17588-17598.
3. Sonne, S.B., et al. 2009. Analysis of gene expression profiles of microdissected cell populations indicates that testicular carcinoma *in situ* is an arrested gonocyte. Cancer Res. 69: 5241-5250.
4. Hu, X., et al. 2009. Comparative serum proteome analysis of human lymph node negative/positive invasive ductal carcinoma of the breast and benign breast disease controls via label-free semiquantitative shotgun technology. OMICS 13: 291-300.
5. Baskind, H.A., et al. 2009. Functional conservation of ASXL2, a murine homolog for the *Drosophila* enhancer of trithorax and polycomb group gene Asx. PLoS ONE 4: e4750.
6. Lowe, C.B., et al. 2010. Endangered species hold clues to human evolution. J. Hered. 101: 437-447.
7. Acquaviva, C., et al. 2010. Myelodysplastic syndromes: lost between two states? Leukemia 24: 1-5.
8. Carbuccia, N., et al. 2010. Mutual exclusion of ASXL1 and NPM1 mutations in a series of acute myeloid leukemias. Leukemia 24: 469-473.


## CHROMOSOMAL LOCATION

Genetic locus: Asxl3 (mouse) mapping to 18 A2.

## PRODUCT

ASXL3 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ASXL3 shRNA Plasmid (m): sc-141312-SH and ASXL3 shRNA (m) Lentiviral Particles: sc-141312-V as alternate gene silencing 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 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

ASXL3 siRNA (m) is recommended for the inhibition of ASXL3 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 ASXL3 gene expression knockdown using RT-PCR Primer: ASXL3 (m)-PR: sc-141312-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 for detailed protocols and support products.