SANTA CRUZ BIOTECHNOLOGY, INC.

UXT siRNA (h): sc-90973

BACKGROUND

UXT (ubiquitously expressed transcript protein), also known as ART-27 (androgen receptor trapped clone 27 protein), is a 157 amino acid protein that is found in the nucleus, cytoplasm, cytoskeleton and centrosome. Expressed ubiquitously, UTX is found at the highest levels in the heart, kidney, liver, adrenal gland, skeletal muscle, peripheral blood leukocytes, lymph node and pancreas. The primay function of UXT is to interact with the N-terminus of the androgen receptor and facilitate receptor-induced transcriptional activation. UXT is also thought to be a component of LRP130, a multidomain organizer that integrates cytoskeletal networks with vesicular trafficking, chromosome remodeling, transcription and cytokinesis. Furthermore, the overexpression of UXT in a number of tumor tissues has suggested that UXT plays a role in tumorigenesis.

REFERENCES

1. Schroer, A., et al. 1999. Cloning and characterization of UXT, a novel gene in human Xp11, which is widely and abundantly expressed in tumor tissue. Genomics 56: 340-343.
2. Zhang, Q.H., et al. 2000. Cloning and functional analysis of cDNAs with open reading frames for 300 previously undefined genes expressed in $CD34^+$ hematopoietic stem/progenitor cells. Genome Res. 10: 1546-1560.
3. Liu, L. and McKeehan, W.L. 2002. Sequence analysis of LRPPRC and its SEC1 domain interaction partners suggests roles in cytoskeletal organization, vesicular trafficking, nucleocytosolic shuttling, and chromosome activity. Genomics 79: 124-136.
4. Markus, S.M., et al. 2002. Identification and characterization of ART-27, a novel coactivator for the androgen receptor N-terminus. Mol. Biol. Cell 13: 670-682.
5. Taneja, S.S., et al. 2004. ART-27, an androgen receptor coactivator regulated in prostate development and cancer. J. Biol. Chem. 279: 13944-13952.
6. Zhao, H., et al. 2005. UXT is a novel centrosomal protein essential for cell viability. Mol. Biol. Cell 16: 5857-5865.

CHROMOSOMAL LOCATION

Genetic locus: UXT (human) mapping to Xp11.23.

PRODUCT

UXT siRNA (h) is a pool of 2 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 UXT shRNA Plasmid (h): sc-90973-SH and UXT shRNA (h) Lentiviral Particles: sc-90973-V as alternate gene silencing products.

For independent verification of UXT (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-90973A and sc-90973B.

RESEARCH USE

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

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

UXT siRNA (h) is recommended for the inhibition of UXT expression in human 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 UXT gene expression knockdown using RT-PCR Primer: UXT (h)-PR: sc-90973-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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