SANTA CRUZ BIOTECHNOLOGY, INC.

UBAP1L siRNA (h): sc-89947

BACKGROUND

Ubiquitin (Ub) is among the most phylogenetically conserved proteins known. The primary function of ubiquitin is to clear abnormal, foreign and improperly folded proteins by targeting them for degradation by the 26S proteosome. Encoded by four genes, ubiquitin is synthesized as precursor proteins that consist of either single ubiquitin moieties fused 5-prime to unrelated carboxyl extension proteins, known as UBA type, or polyubiquitin chains that are cleaved into moieties of the UBB or UBC types. As a member of the UBA (ubiquitin-associated) domain family, UBAP1L (Ubiquitin associated protein 1-like) is a 381 amino acid protein that contains one UMA domain. UBAP1L is encoded by a gene located on human chromosome 15q22.2. Chromosome 15 encodes more than 700 genes, is made up of approximately 106 million base pairs and is about 3% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: UBAP1L (human) mapping to 15q22.31.

PRODUCT

UBAP1L siRNA (h) 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 UBAP1L shRNA Plasmid (h): sc-89947-SH and UBAP1L shRNA (h) Lentiviral Particles: sc-89947-V as alternate gene silencing products.

For independent verification of UBAP1L (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-89947A, sc-89947B and sc-89947C.

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

UBAP1L siRNA (h) is recommended for the inhibition of UBAP1L 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 UBAP1L gene expression knockdown using RT-PCR Primer: UBAP1L (h)-PR: sc-89947-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.