

UBAP2 siRNA (h): sc-92700

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 proteasome. Encoded by four genes, ubiquitin is synthesized as precursor proteins that consist of either single ubiquitin moieties fused 5' to unrelated carboxyl extension proteins, known as UBA type, or polyubiquitin chains that are cleaved into moieties of the UBB or UBC types. There are many different ubiquitin-binding proteins, though the UBA (ubiquitin-associated) domain-containing proteins is the largest family and includes members involved in different cell processes. As a member of the UBA domain family, UBAP2 (ubiquitin-associated protein 2) is a 1,119 amino acid protein that is phosphorylated upon DNA damage, probably by ATR or ATM.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: UBAP2 (human) mapping to 9p13.3.

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.

PRODUCT

UBAP2 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see UBAP2 shRNA Plasmid (h): sc-92700-SH and UBAP2 shRNA (h) Lentiviral Particles: sc-92700-V as alternate gene silencing products.

For independent verification of UBAP2 (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-92700A, sc-92700B and sc-92700C.

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

UBAP2 siRNA (h) is recommended for the inhibition of UBAP2 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 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 UBAP2 gene expression knockdown using RT-PCR Primer: UBAP2 (h)-PR: sc-92700-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.