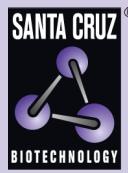


# PPIAL4 siRNA (h): sc-78771



## BACKGROUND

PPIAL4 (peptidylprolyl isomerase A (cyclophilin A)-like 4), also known as COAS2, PPIAL4A, PPIAL4B, PPIAL4C, PPIAL4D or PPIAL4G, is a 164 amino acid protein that contains one PPIase cyclophilin-type domain and belongs to the cyclophilin-type PPIase family and the PPIase A subfamily. Localizing to cytoplasm, PPIAL4 is one of seven related genes or pseudogenes, in a cluster that likely results from gene duplication on chromosome 1. Similar to other PPIases, PPIAL4 accelerates the folding of proteins and catalyzes the *cis-trans* isomerization of proline imidic peptide bonds in oligopeptides. PPIAL4 shares 84% amino acid identity with cyclophilin A, including complete conservation of critical residues in the active site and in the *cis*-proline binding pocket. Ubiquitously expressed, with highest expression in brain and lowest in skeletal muscle, PPIAL4 also exhibits high expression in several osteosarcomas and breast cancer cell lines.

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## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: PPIAL4A (human) mapping to 1q21.2.

## PRODUCT

PPIAL4 siRNA (h) 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 transfactions. Also see PPIAL4 shRNA Plasmid (h): sc-78771-SH and PPIAL4 shRNA (h) Lentiviral Particles: sc-78771-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

PPIAL4 siRNA (h) is recommended for the inhibition of PPIAL4 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 PPIAL4 gene expression knockdown using RT-PCR Primer: PPIAL4 (h)-PR: sc-78771-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.