



AFAP-1L2 siRNA (m): sc-140896

BACKGROUND

Actin filament associated protein (AFAP-110) interacts directly with Actin filaments through its C-terminal Actin-binding domain. AFAP-110 contains additional protein-binding domains as well, and serves as an adaptor protein. By linking signaling molecules to Actin filaments, AFAP-110 provides a platform for the preparation of larger signaling complexes, activates Src kinases in response to cellular signals and also directly affects Actin organization as an Actin filament cross-linking protein. AFAP-1L2 (Actin filament-associated protein 1-like 2), also known as XB130, is a 818 amino acid cytoplasmic protein that contains two Pleckstrin homology (PH) domains, which are normally found in proteins involved in intracellular signaling. Like its relative AFAP-110, AFAP-1L2 interacts with Src kinase and may play a role in Src-regulated transcription activation. AFAP-1L2 is expressed in thyroid and spleen and can also be detected at lower levels in lung, brain, pancreas and kidney. There are four isoforms of AFAP-1L2 that are produced as a result of alternative splicing events.

REFERENCES

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4. Rikova, K., et al. 2007. Global survey of phosphotyrosine signaling identifies oncogenic kinases in lung cancer. *Cell* 131: 1190-1203.
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CHROMOSOMAL LOCATION

Genetic locus: Afap1l2 (mouse) mapping to 19 D2.

PRODUCT

AFAP-1L2 siRNA (m) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see AFAP-1L2 shRNA Plasmid (m): sc-140896-SH and AFAP-1L2 shRNA (m) Lentiviral Particles: sc-140896-V as alternate gene silencing products.

For independent verification of AFAP-1L2 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-140896A and sc-140896B.

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

AFAP-1L2 siRNA (m) is recommended for the inhibition of AFAP-1L2 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 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 AFAP-1L2 gene expression knockdown using RT-PCR Primer: AFAP-1L2 (m)-PR: sc-140896-PR (20 μ l). 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.