

AP-3 μ 2 siRNA (h): sc-105075

BACKGROUND

Clathrin-coated pits and vesicles are assembled for receptor-mediated endocytosis through interaction with Clathrin associated protein complexes. AP-3 μ 2 (adaptor-related protein complex 3, μ 2 subunit), also known as Clathrin assembly protein complex 1 medium chain homolog 2, Clathrin coat assembly protein AP47 homolog 2, AP47B or CLA20, is a 418 amino acid protein that localizes to the Golgi apparatus. AP-3 μ 2 exists as part of the AP-3 complex with AP-3 δ (AP-3 σ) and AP-3 sigma (AP-3 σ), which assists in vesicle budding at the Golgi membrane. AP-3 μ 2 contains one MHD (μ homology) domain and belongs to the adaptor complexes medium subunit family. The gene encoding AP-3 μ 2 maps to human chromosome 8p11.21.

REFERENCES

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3. Hirst, J. and Robinson, M.S. 1998. Clathrin and adaptors. *Biochim. Biophys. Acta* 1404: 173-193.
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CHROMOSOMAL LOCATION

Genetic locus: AP3M2 (human) mapping to 8p11.21.

PRODUCT

AP-3 μ 2 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 AP-3 μ 2 shRNA Plasmid (h): sc-105075-SH and AP-3 μ 2 shRNA (h) Lentiviral Particles: sc-105075-V as alternate gene silencing products.

For independent verification of AP-3 μ 2 (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-105075A, sc-105075B and sc-105075C.

PROTOCOLS

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

AP-3 μ 2 siRNA (h) is recommended for the inhibition of AP-3 μ 2 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 AP-3 μ 2 gene expression knockdown using RT-PCR Primer: AP-3 μ 2 (h)-PR: sc-105075-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.