

# FAM18A siRNA (h): sc-270476

## BACKGROUND

FAM18A is a 213 amino acid multi-pass membrane protein that is encoded by a gene that maps to human chromosome 16, which encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The rare disorder Rubinstein-Taybi syndrome is associated with chromosome 16, as is Crohn's disease, a gastrointestinal inflammatory condition that may involve the NOD2 gene. An association with systemic lupus erythematosus and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TVP23A (human) mapping to 16p13.13.

## PRODUCT

FAM18A 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see FAM18A shRNA Plasmid (h): sc-270476-SH and FAM18A shRNA (h) Lentiviral Particles: sc-270476-V as alternate gene silencing products.

For independent verification of FAM18A (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-270476A, sc-270476B and sc-270476C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

FAM18A siRNA (h) is recommended for the inhibition of FAM18A 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  $\mu$ M in 66  $\mu$ 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 FAM18A gene expression knockdown using RT-PCR Primer: FAM18A (h)-PR: sc-270476-PR (20  $\mu$ 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](http://www.scbt.com) for detailed protocols and support products.