

## 2810408M09Rik siRNA (m): sc-108847

### BACKGROUND

2810408M09Rik, also known as MGC102419 or RP23-395E18.2, is a 244 amino acid protein that is encoded by a gene that maps to murine chromosome 2 H3. 2810408M09Rik is the mouse homolog of human CGI-121. CGI-121, also known as TP53RK-binding protein and PRPK-binding protein, is a 175 amino acid protein that is widely expressed. Localizing to the cytoplasm and nucleus, CGI-121 interacts with PRPK, a protein kinase that phosphorylates Ser15 of p53. PRPK phosphorylation of p53 causes increased stabilization and activity of p53. CGI-121 may act as an inhibitor of the PRPK-p53 interaction, thus preventing the phosphorylation of p53. The gene encoding CGI-121 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. There are three isoforms of CGI-121 that are produced as a result of alternative splicing events.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: 2810408M09Rik (mouse) mapping to 2 H3.

### PRODUCT

2810408M09Rik siRNA (m) 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see 2810408M09Rik shRNA Plasmid (m): sc-108847-SH and 2810408M09Rik shRNA (m) Lentiviral Particles: sc-108847-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  $\mu$ 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

2810408M09Rik siRNA (m) is recommended for the inhibition of 2810408M09Rik 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  $\mu$ 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 2810408M09Rik gene expression knockdown using RT-PCR Primer: 2810408M09Rik (m)-PR: sc-108847-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.