# D430042O09Rik siRNA (m): sc-142824



The Power to Question

## **BACKGROUND**

KIAA0566 is a 1,618 amino acid protein that contains one coiled coil domain and is post-translationally phosphorylated at serine resides 453 and 691. The gene encoding KIAA0556 maps to human chromosome 16, which encodes over 900 genes with approximately 90 million base pairs and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, though through the CREBBP gene which encodes a critical CREB binding protein. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene. An association with systemic lupus erythematosis and a number of other autoimmune disorders within 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: D430042009Rik (mouse) mapping to 7 F3.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **PRODUCT**

D430042009Rik siRNA (m) 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 D430042009Rik shRNA Plasmid (m): sc-142824-SH and D430042009Rik shRNA (m) Lentiviral Particles: sc-142824-V as alternate gene silencing products.

For independent verification of D430042009Rik (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-142824A, sc-142824B and sc-142824C.

## 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**

D430042009Rik siRNA (m) is recommended for the inhibition of D430042009Rik 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 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 D430042009Rik gene expression knockdown using RT-PCR Primer: D430042009Rik (m)-PR: sc-142824-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

#### **PROTOCOLS**

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

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