

1110012L19Rik siRNA (m): sc-108152

BACKGROUND

EOLA1 (endothelial-overexpressed lipopolysaccharide-associated factor 1), also known as CXorf40A, CXorf40 or FLJ52212, is a 158 amino acid protein that may have a role in cell protection during an inflammation reaction. EOLA1 is expressed at high levels in skeletal muscle, liver, kidney, heart and placenta, with lower expression found in colon, small intestine and spleen. EOLA1 interacts with Metallothionein 2A, a member of the Metallothionein family. Metallothioneins are a group of ubiquitous low-molecular-weight proteins that have functional roles in cell growth, repair and differentiation. Due to their essential role in the protection of cells against the toxicity of cadmium, mercury, and copper, metallothioneins are implicated primarily in metal ion detoxification. Metallothionein, as an acute phase or stress-response protein and free radical scavenger, is related to inflammation and cellular protection from reactive forms of oxygen, ionizing radiation, pharmacological agents and mutagens. Metallothioneins are known to be broadly expressed in heart, liver, kidney, breast and testis tissue.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: 1110012L19Rik (mouse) mapping to X A7.1.

PRODUCT

1110012L19Rik 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see 1110012L19Rik shRNA Plasmid (m): sc-108152-SH and 1110012L19Rik shRNA (m) Lentiviral Particles: sc-108152-V as alternate gene silencing products.

For independent verification of 1110012L19Rik (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-108152A, sc-108152B and sc-108152C.

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

1110012L19Rik siRNA (m) is recommended for the inhibition of 1110012L19Rik 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 1110012L19Rik gene expression knockdown using RT-PCR Primer: 1110012L19Rik (m)-PR: sc-108152-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.