SANTA CRUZ BIOTECHNOLOGY, INC.

Gstp2 siRNA (m): sc-145817

BACKGROUND

Glutathione S-transferases (GSTs) function in the metabolic detoxification of various environmental carcinogens and lipid hydroperoxides. Members of the murine GSTP (glutathione S-transferase π) family, termed GSTP1 and Gstp2, are linked to drug resistance and are markers for many cancers. GSTP proteins modulate cell signaling by interacting with c-Jun N-terminal kinase (JNK), and may play a protective role in the development of spontaneous tumors. GSTP has been found in substantia nigra and may be associated with reactive oxygen species-induced neurological disorders such as Parkinson's disease and may additionally protect against endothelial dysfunction induced by tobacco smoke exposure. Gstp2 (glutathione S-transferase, π 2), also known as GST3, GST YF-YF or GSTπA, is a 210 amino acid protein belonging to the GST superfamily and π family. Gstp2 is selectively expressed in skeletal muscle, gall bladder, heart and colon, and exists as a homodimer. Gstp2 contains one GST C-terminal domain and a GST N-terminal domain.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Gstp2 (mouse) mapping to 19 A.

PRODUCT

Gstp2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Gstp2 shRNA Plasmid (m): sc-145817-SH and Gstp2 shRNA (m) Lentiviral Particles: sc-145817-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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Gstp2 siRNA (m) is recommended for the inhibition of Gstp2 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 Gstp2 gene expression knockdown using RT-PCR Primer: Gstp2 (m)-PR: sc-145817-PR (20 µl). 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.