SANTA CRUZ BIOTECHNOLOGY, INC.

IER5L siRNA (h): sc-92876

BACKGROUND

IER5L (immediate early response gene 5-like protein) is a 404 amino acid protein belonging to the immediate early response (IER) family of proteins. IER proteins are the first gene products to be induced during growth stimulation and/or arrest. Considered an early transcription factor, IER5 (immediate early response 5) may be involved in mediating PSP (proteins and peptide bound polysaccharides)-induced apoptosis in HL-60 cells. PSP extracted from *Basidiomycetous fungi* are widely used in cancer immunotherapy and suggested to induce apoptosis in cancer cells *in vitro*. Existing as two alternatively spliced isoforms, the gene encoding IER5L maps to human chromosome 9q34.11 and mouse chromosome 2 B.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IER5L (human) mapping to 9q34.11.

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.

PRODUCT

IER5L 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see IER5L shRNA Plasmid (h): sc-92876-SH and IER5L shRNA (h) Lentiviral Particles: sc-92876-V as alternate gene silencing products.

For independent verification of IER5L (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-92876A, sc-92876B and sc-92876C.

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

IER5L siRNA (h) is recommended for the inhibition of IER5L 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 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 IER5L gene expression knockdown using RT-PCR Primer: IER5L (h)-PR: sc-92876-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.