SANTA CRUZ BIOTECHNOLOGY, INC.

peropsin siRNA (m): sc-45796

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The opsins are important proteins in the visual/irradiance detection cycle where they utilise a retinaldehyde chromophore in their photoisomerase role. Visual pigment-like receptor peropsin, also designated retinal pigment epithelium-derived rhodopsin homologue (RRH), belongs to the opsin subfamily of the larger G protein-coupled receptor 1 family. Peropsin is an integral membrane protein that is crucial to retinal pigment epithelial physiology. It monitors the concentration of retinoids or detects light directly. Peropsin is detected exclusively in the eye, where it localizes to the microvilli surrounding the photoreceptor outer segments of the retinal pigment epithelium.

REFERENCES

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3. Tarttelin, E.E., et al. 2003. Expression of opsin genes early in ocular development of humans and mice. Exp. Eye Res. 76: 393-396.
4. Bellingham, J., et al. 2003. In silico characterisation and chromosomal localisation of human RRH (peropsin)—implications for opsin evolution. BMC Genomics 4: 3.
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APPLICATIONS

peropsin siRNA (m) is recommended for the inhibition of peropsin 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 peropsin gene expression knockdown using RT-PCR Primer: peropsin (m)-PR: sc-45796-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.

PROTOCOLS