PRODUCT INFORMATION

LipidLaunch™ SM-102 LNP (siRNA hINHBE)

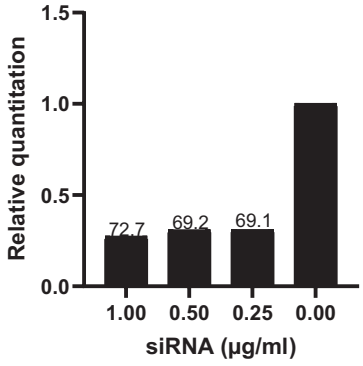
Item No. 43543

Overview and Properties

Synonyms: Inhibin Beta E Chain, LipidLaunchTM SM-12 Lipid Nanoparticle (siRNA hINHBE)
Uniprot No.: P58166
Storage: -80°C (as supplied)
Stability: ≥6 months
Supplied in: TBS, pH 7.5, with 10% sucrose

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Huh7 hepatocytes were treated with LNPs at the indicated concentrations of siRNA for 24 hours. RNA was extracted and RT-PCR performed with a GAPDH control to quantify the extent of INHBE knockdown. The average percent knockdown is indicated above each bar.

Description

LipidLaunch™ SM-102 LNP (siRNA hINHBE) is a solution containing lipid nanoparticles (LNPs) composed of the ionizable cationic amino lipid SM-102 (Item No. 33474), cholesterol (Item No. 9003100), 1,2-distearoyl-*sn*-glycero-3-PC (DSPC; Item No. 15100), and the lipid excipient DMG-PEG(2000) (Item No. 33945) at a molar ratio of 50:38.5:10:1.5 and encapsulating siRNA targeting human inhibin beta E chain (hINHBE), a hepatokine involved in hepatocyte viability, thermogenesis, and insulin sensitivity.[1-3] It is intended for use in the knockdown of hINHBE *in vitro* and can be used in any cells expressing hINHBE.

Suggested *in vitro* use: Thaw LNPs on ice with occasional gentle swirling (*Do not vortex!*). Using a gentle pipetting technique, dilute 1:100-1:500 in complete cell culture media (with serum) and add to subconfluent cells. Knockdown of INHBE may be detected between six and 48 hours after transfection.

References

1. Wada, W., Medina, J.J., Kuwano, H., *et al*. Comparison of the function of the βC and βE subunits of activin in AML12 hepatocytes. *Endocr. J.* **52(2),** 169-175 (2005).
2. Hasimoto, O., Funaba, M., Sekiyama, K., *et al*. Activin E controls energy homeostasis in both brown and white adipose tissues as a hepatokine. *Cell Rep.* **25(5)**, 1193-1203 (2018).
2. Hasimoto, O., Tsuchida, K., Ushiro, Y., *et al*. cDNA cloning and expression of human activin βE subunit. *Mol. Cell. Endocrinol.* **194(1-2)**, 117-122 (2002).

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