PRODUCT INFORMATION



DNCA

Item No. 38554

CAS Registry No.: Formal Name:	2226561-66-4 4-amino-N-[2,3- <i>bis</i> [(9Z)-9-	
	octadecen-1-yloxy]propyl]-2-oxo-	
	1(2H)-pyrimidineacetamide	
MF:	$C_{45}H_{82}N_4O_4$	/
FW:	743.2	/
Purity:	≥95%	$\sim \sim$
Supplied as:	A solution in ethanol	
Storage:	-20°C	
Stability:	≥3 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Description

DNCA is a neutral lipid that has been used in the generation of lipid nanoparticles (LNPs).¹ Intravenous administration of LNPs containing DNCA and encapsulating siRNA targeting BRAF containing a valine-to-glutamate substitution at position 600 (BRAF^{V600E}) reduce tumor BRAF^{V600E} expression and tumor weight and volume without reducing animal weight in an A375 melanoma mouse xenograft model. Intratumoral administration of LNPs containing DNCA and encapsulating cyclic di-GMP (Item No. 17144) decreases tumor volume, increase survival, and increase the ratio of tumor-associated cytotoxic/exhausted CD4⁺ and CD8⁺ T cells in an EO771 murine model of primary breast cancer with tumor rechallenge.²

References

- 1. Zhou, X., Pan, Y., Li, Z., et al. siRNA packaged with neutral cytidinyl/cationic/PEG lipids for enhanced antitumor efficiency and safety in vitro and in vivo. ACS Appl. Bio Mater. 3(9), 6297-6309 (2020).
- 2. Yu, X., Yu, J., Dai, H., et al. Novel formulation of c-di-GMP with cytidinyl/cationic lipid reverses T cell exhaustion and activates stronger anti-tumor immunity. Theranostics 12(15), 6723-6739 (2022).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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