## Diamino lipid DAL4

MedChemExpress

Cat. No.:	HY-151508	
CAS No.:	2939000-43-6	
Molecular Formula:	$C_{52}H_{99}BFN_{3}O_{3}$	
Molecular Weight:	844.17	
Target:	Liposome	
Pathway:	Metabolic Enzyme/Protease	
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	

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Description	Diamino lipid DAL4 is novel lipid nanoparticles (LNPs) encapsulated with mRNAs encoding cytokines including IL-12, IL-27 and GM-CSF. Diamino lipid DAL4 delivers mRNA to tumor cells to exert anti-tumor activity <sup>[1]</sup> .	
In Vitro	Diamino lipid DAL4 (DAL4-LNP) effectively delivers different mRNAs in vitro to tumor cells <sup>[1]</sup> .	
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Diamino lipid DAL4 (DAL4-LNP) loaded with IL-12 mRNA (intratumoral injection) is most potent in inhibiting B16F10	
	melanoma tumor growth compared to IL-27 or GM-CSF mRNAs in monotherapy <sup>[1]</sup> .	
	Diamino lipid DAL4 loaded with IL-12 mRNA and IL-27 mRNA (intratumoral injection) shows synergistic effect in suppressing tumor growth without causing systematic toxicity <sup>[1]</sup> .	
	And also Diamino lipid DAL4 induces robust infiltration of immune effector cells, including IFN- $\gamma$ and TNF- $\alpha$ producing	
	natural killer cells (NK) and CD8 <sup>+</sup> T cells into tumors <sup>[1]</sup> .	
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

## REFERENCES

[1]. Liu JQ, et al. Intratumoral delivery of IL-12 and IL-27 mRNA using lipid nanoparticles for cancer immunotherapy. J Control Release. 2022 May;345:306-313.

Caution: Product has not been fully validated for medical applications. For research use only.

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