

PRODUCT INFORMATION

IAJD249

Item No. 39689

CAS Registry No.: 3076338-32-1

Formal Name: 3-(octyloxy)-2,2-bis((octyloxy)methyl)propyl 4-(4-(2-hydroxyethyl)piperazin-1-yl)butanoate

Synonym: Ionizable Amphiphilic Janus Dendrimer 249

MF: $C_{39}H_{78}N_2O_6$

FW: 671.0

Purity: $\geq 95\%$

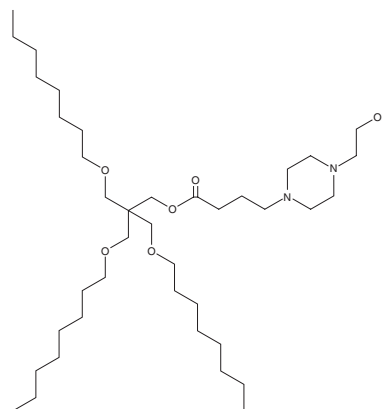
Supplied as: A 25 mg/ml solution in ethanol

Storage: -20°C

Stability: ≥ 2 years

Special Conditions: Oxygen sensitive

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



Laboratory Procedures

IAJD249 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice, which should be purged with an inert gas. IAJD249 is soluble in ethanol and methanol.

Description

IAJD93 is an ionizable amphiphilic Janus dendrimer (IAJD) delivery system for mRNA ($pK_a = 6.35$).¹ It co-assembles with mRNA to form dendrimersome nanoparticles (DNPs) in acetate buffer. IAJD93 co-assembled with luciferase mRNA delivers the mRNA to the spleen, liver, lungs, and lymph nodes in mice.

Reference

1. Lu, J., Atochina-Vasserman, E.N., Maurya, D.S., *et al.* Targeted and equally distributed delivery of mRNA to organs with pentaerythritol-based one-component ionizable amphiphilic Janus dendrimers. *J. Am. Chem. Soc.* **145**(34), 18760-18766 (2023).

WARNING

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

SAFETY 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.

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