# **PRODUCT** INFORMATION



**ATX-100** 

Item No. 36935

CAS Registry No.:	2230647-37-5		
Formal Name:	4,4'-[[[[3-(dimethylamino)propyl]		
	thio]carbonyl]imino] <i>bis</i> -butanoic		_N_
	acid, 1,1'-bis(1-heptyloctyl) ester		
MF:	$C_{44}H_{86}N_{2}O_{5}S$	$\sim$	
FW:	755.2		
Purity:	≥98%		° × °
Supplied as:	A solution in chloroform		
Storage:	-20°C		$\sim \sim \sim \sim$
Stability:	≥2 years		
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.			

Laboratory Procedures

ATX-100 is supplied as a solution in chloroform. To change the solvent, simply evaporate the chloroform under a gentle stream of nitrogen and immediately add the solvent of choice. ATX-100 is soluble in ethanol, methanol, and DMSO.

# Description

ATX-100 is an ionizable cationic lipid (pK<sub>a</sub> = 6.38).<sup>1,2</sup> It has been used in the generation of lipid nanoparticles (LNPs) for the delivery of siRNA. Intravenous administration of LNPs containing ATX-100 and encapsulating Factor VII siRNA decrease Factor VII blood levels in mice.<sup>2</sup>

# References

- 1. Rajappan, K., Tanis, S.P., Roberts, S., et al. Development of a safe and scalable process for the production of a high-purity thiocarbamate-based ionizable lipid as an excipient in mRNA-encapsulating lipid nanoparticles. Org. Process Res. Dev. 25(6), 1383-1390 (2021).
- 2. Rajappan, K., Tanis, S.P., Mukthavaram, R., et al. Property-driven design and development of lipids for efficient delivery of siRNA. J. Med. Chem. 63(21), 12992-13012 (2020).

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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