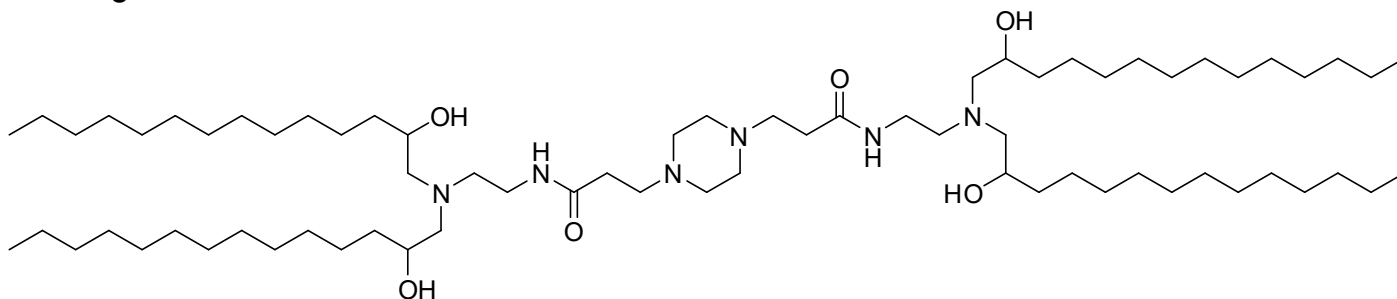


## MIC1/ Lipid C2

Catalog number: N-1004



**Molecular Formula:** C<sub>70</sub>H<sub>142</sub>N<sub>6</sub>O<sub>6</sub>

**MW:** 1163.94

**CAS:** 3003022-09-8

**Alternative Names:** 3,3'-(piperazine-1,4-diyl)bis(N-(2-(bis(2-hydroxytetradecyl)amino)ethyl)propanamide)

**Solubility:** ~5mg/mL in Methanol

**Storage and Handling:** Store dry at -20°C, Stock solution should be stored frozen (-20°C or below).

**Background:** Targeting EBV-protein with mRNA vaccines is a promising way to treat EBV-related tumors. MIC1 lipid nanoparticles can be used as vehicle to deliver mRNA vaccine to tumor-draining lymph nodes. This LNP exhibited high transfection efficiency and lysosomal escape ability. This ionized lipid may have wide applications in immunotherapy in EBV-related tumors.

### References:

Yu Xiang, et al "LMP2-mRNA lipid nanoparticle sensitizes EBV-related tumors to anti-PD-1 therapy by reversing T cell exhaustion" *Journal of Nanobiotechnology*, 2023, 21:324

**Hazardous Properties and Cautions:** The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

**Warranty and Disclaimer:** Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

---

Technical Data Sheet, Rev 1, 3-25-24 – For research use only. Not intended for diagnostic or therapeutic use.

