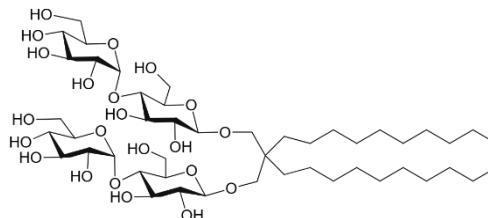


Technical Data Sheet

LMNG (Lauryl Maltose Neopentyl Glycol)

Catalog Number: LMN01, LMN02, LMN03



Chemical Name	2,2-didecylpropane-1,3-diylbis[4-O- α -D-glucopyranosyl- β -D-glucopyranoside]
Physical State	White Solid
CAS NO.	1257852-96-2
Molecular Formula	$C_{47}H_{88}O_{22}$
Molecular Weight	1005.19
Purity	$\geq 98.0\%$
CMC	(H ₂ O) $\sim 0.01\text{mM}$ (1) (0.001% (W/V))
pH	5-8 (1% solution in water)
Conductance	$< 100 \mu\text{S}$ (5% solution in water)
Solubility	$\geq 5\%$ (in water at 20 °C)

Product Description

LMNG (Lauryl Maltose Neopentyl Glycol) is a new-generation MNG-class amphiphilic detergent designed for high-performance membrane-protein research. Compared with conventional detergents, LMNG features a unique neopentyl-glycol core scaffold (double-head, double-tail structure), delivering mild yet efficient solubilization capacity. It preserves the native conformation and functional activity of membrane proteins to the greatest extent during extraction.

LMNG can be used in combination with other detergents. It is applicable for extraction and purification of unstable membrane proteins, such as GPCRs and ion channels, sample preparation for structural biology, including cryo-EM and protein crystallization, as well as studies on drug-target stability and biomolecular interaction analysis.

Transportation and Storage

- Ship at ambient temperature.
- Powder: -20 °C for 3 years
- In solvent: -80 °C for 1 year

Applications

- Extraction and purification of unstable membrane proteins, including GPCRs and ion channels
- Sample preparation for structural biology, such as cryo-EM and protein crystallization
- Drug-target stability studies
- Biomolecular interaction analysis

Notice

1. To ensure the safety and health of operators, laboratory coats and disposable gloves must be worn throughout the entire experimental procedure.
2. Certain technical information provided with this product is intended for customer reference, academic communication, and scientific

research purposes only. Our company does not warrant the absolute accuracy or completeness of the information provided.

3. This product is for research use only. It is strictly prohibited for use in clinical diagnosis, treatment, food, pharmaceuticals, or any other applications involving human use. Do not store this product in ordinary residential premises.