## **Lipidic Cubic Phase Crystals**





Crystallization in the Lipidic Cubic Phase (LCP) has evolved into an important method for crystallization of membrane proteins, with the lipid Monoolein being the first choice to create a stable LCP. In the past few years however, the short lipids 7.7  $MAG^{[4,7]}$ , 7.8  $MAG^{[6-8]}$ . 7.9  $MAG^{[5,7]}$  have become increasingly popular and the recent progress in applying the highly viscous lipidic cubic phase for serial femtosecond crystallography (LCP-SFX) [1-3] further accelerates the success of the LCP method by

- > delivering the crystal-loaded viscous LCP directly into the XFEL beam (thereby reducing sample consumption in comparison to liquid injectors),
- > taking advantage of the inherently small crystals grown in LCP,
- > avoiding tricky crystal mounting from LCP.

| LCP Lipid  | Lipid structure                         | Cat-No.   | Amount |
|--|---|-----------|--------|
| Monoolein 9.9 MAG  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | X-LCP-101 | 1 g    |
| 7.7 MAG  |   | X-LCP-105 | 100 mg |
| 7.8 MAG  | о <sub>ОН</sub>                         | X-LCP-106 | 100 mg |
| <b>7.9 MAG</b> Stable at low temperatures <sup>[9]</sup> | OH OH                                   | X-LCP-107 | 100 mg |
| Monopalmitolein 9.7 MAG                                  | О ОН ОН                                 | X-LCP-102 | 1 g    |
| Monovaccenin 11.7 MAG                                    |   | X-LCP-103 | 100 mg |
| Monoeicosenoin 11.9 MAG                                  | ů o o o o o o o o o o o o o o o o o o o | X-LCP-104 | 1 g    |

## References:

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