TECHNICAL DATA SHEET

Facade-EM

Catalog Number	850522	Physical state	Powder
Purity	> 99%	Transition temp.	No data
CAS		CMC	~0.1 mM
Synonyms	3α-hydroxy-7α, 12α-di-((Ο-β-D-maltosyl)-2-hydroxyethoxy)-cholane	pK _a	No data
Molec. Formula	$C_{52}H_{90}O_{25}$	TLC mobile phase	C:M:W*, 65:25:4, v/v
MW	1115.258	Exact Mass	1114.577
Percent composition	C 56.00% H 8.13% O 35.86%		
Stability	Store in <-20°C freezer for up to one year		
Solubility	Soluble in ethanol, methanol, water and chloroform		
Web link	850522		

*C, chloroform; M, methanol; W, water

Description:

In the past, only one-dimensional lipids with a polar head and non-polar fatty acid tails were available. Characterizing membrane proteins was problematic because these proteins needed a native membrane system to fold properly and they were not stable when extracted by available detergents or reconstituted in synthetic lipid membranes. To stabilize and provide structure for integral membrane proteins, new two-dimensional facial amphiphiles, such as Facade EM, have been created and are exclusively offered by Avanti Polar Lipids, Inc. In addition to protein reconstitution, this detergent has been shown to aid in protein crystallization.

Reference:

- Zhang Q et al (2007) Designing facial amphiphiles for the stabilization of integral membrane proteins. Angew Chem Int Ed Engl. 46(37):7023-5
- Stroud RM (2011) New tools in membrane protein determination.
 F1000 Biol Rep. 3:8

Related products: Detergents

MSDS: Available at www.avantilipids.com for Product Number 850522



