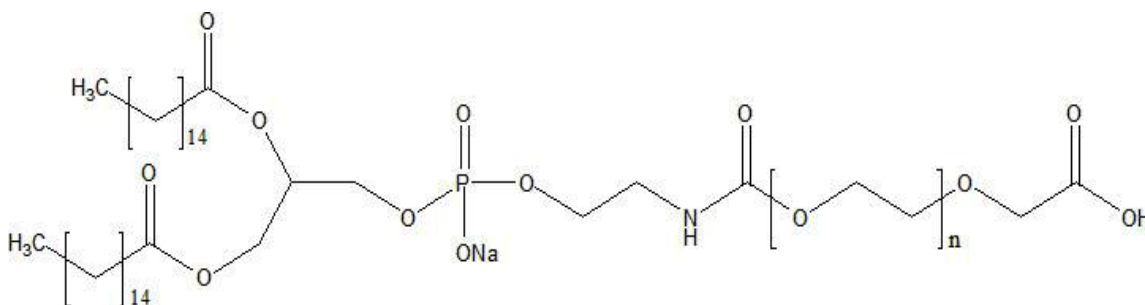


## Certificate of Analysis

### General properties:

Product Name: DPPE-PEG-COOH  
 Molecular Weight: PEG MW:750, 1000, 2000, 3400, 5000 Dalton  
 Catalog Number: R-0108  
 Lot Number: RS171504

### Product Structure:



### Product Specifications:

Items	Specification	Results
Appearance	White solid or viscous liquid	White solid or viscous liquid
<sup>1</sup> H NMR	Identical to the structure	Identical to the structure
Substitution of DPPE by NMR	>90%	>90%
Substitution of COOH by NMR	>90%	>90%

Date of Analysis: 2017.09.15

Recommended Retest date: 2018.09.14

Recommended Storage: -20°C in the dark

Stability: 1 year

**This product is for research use only, Not for human or animal use**