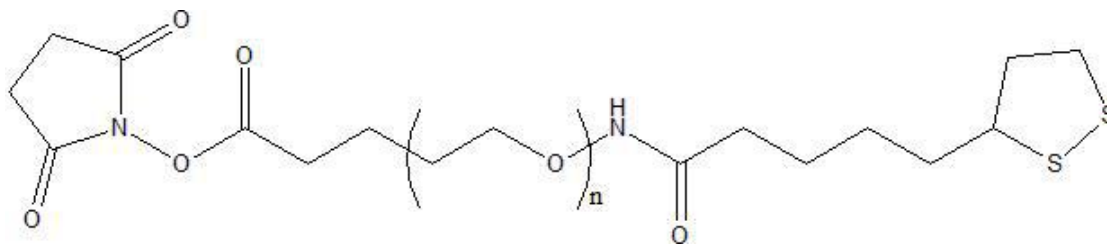


## Certificate of Analysis

### General properties:

Product Name: Lipoic acid-PEG-NHS  
 Molecular Weight: PEG MW:750/1000/2000/3400/5000 Dalton  
 Catalog Number: R-1110  
 Lot Number: RO170917

### Product Structure:



### Product Specifications:

Items	Specification	Results
Appearance	White/Off-white solid or viscous liquid	White/Off-white solid or viscous liquid
<sup>1</sup> H NMR	Identical to the structure	Identical to the structure
Substitution of Lipoic acid by NMR	>90%	>90%
Substitution of NHS by NMR	>90%	>90%

Date of Analysis: 2017.09.27

Recommended Retest date: 2018.09.26

Recommended Storage: -20°C

Stability: 1 year

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