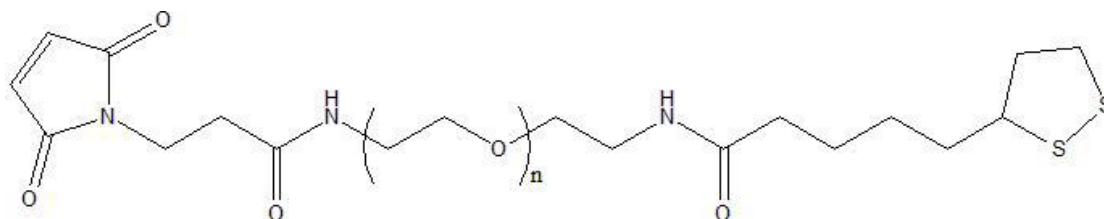


Certificate of Analysis

General properties:

Product Name: lipoic acid-PEG2000-MAL
 Molecular Weight: PEG MW:750/1000/2000/3400/5000 Dalton
 Catalog Number: R-7870
 Lot Number: RA0675929

Product Structure:



Product Specifications:

Items	Specification	Results
Appearance	Solid powder or viscous liquid	Solid powder or viscous liquid
¹ H NMR	Identical to the structure	Identical to the structure
Substitution of lipoic acid by NMR	>90%	>90%
Substitution of MAL by NMR	>90%	>90%

Date of Analysis: 2017.09.27

Recommended Retest date: 2018.09.27

Recommended Storage: -20°C

Stability: 1 year

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