

Product Information

Lipoamide/Maleimide PEG reagent, Lipoamide-PEG3-Mal, Purity ≥95%

Cat. No.: X26-09-ZQ404

Size: 100 mg; 250 mg; 500 mg

CAS Number: 1314378-19-2

PubChem CID: 77078204

Synonym: Lipoamido-PEG3-maleimide; Lipoamide-PEG3-maleimide; Lipoamido-polyethylene glycol3-maleimide; Lipoamido-triethylene glycol-maleimide; Lipoamide-PEG3-maleimide

This product is for research use only and is not intended for diagnostic use.

Product Information	
Description	This product is a specialized bifunctional polyethylene glycol (PEG) crosslinker featuring a lipoamide domain and a maleimide (Mal) group. The lipoamide moiety exhibits high affinity for gold and semiconductor surfaces, while the maleimide group reacts specifically with free sulfhydryl groups at physiological pH. The short PEG chain acts as a flexible spacer between the two reactive sites.
Molecular Weight	559.7
Molecular Formula	C ₂₅ H ₄₁ N ₃ O ₇ S ₂
Functional Group 1	Lipoamide
Functional Group 2	Maleimide
Reactive Group 1	Thiol
IUPAC Name	N -[3-[2-[2-[3-[3-(2,5-dioxopyrrol-1-yl)propanoylamino]propoxy]ethoxy]ethoxy]propyl]-5-(dithiolan-3-yl)pentanamide
InChI	InChI=1S/C25H41N3O7S2/c29-22(6-2-1-5-21-10-20-36-37-21)26-11-3-14-33-16-18-35-19-17-34-15-4-12-27-23(30)9-13-28-24(31)7-8-25(28)32/h7-8,21H,1-6,9-20H2,(H,26,29)(H,27,30)
InChI Key	CMMJPHOERVZWAY-UHFFFAOYSA-N
Canonical SMILES	C1CSSC1CCCCC(=O)NCCCOCCOCCOCCNC(=O)CCN2C(=O)C=CC2=O
Purity	≥95%
Applications	This product can be used to immobilize thiol-containing biological molecules onto gold substrates, synthesize functionalized nanoparticle conjugates, and construct stable biosensor arrays for molecular recognition studies.
Storage	Store at -20°C.

