

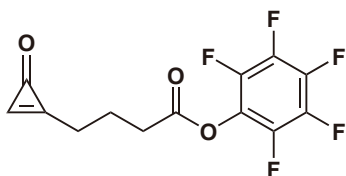
New

CHEMISTRY

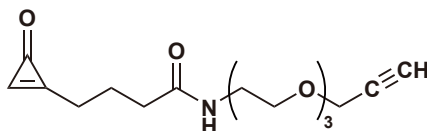
LIFE SCIENCE

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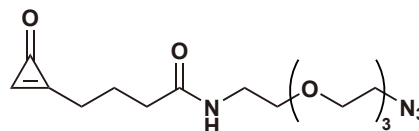
Conjugation Reagents Selectively Reacting with N-Terminal Cysteine Residues



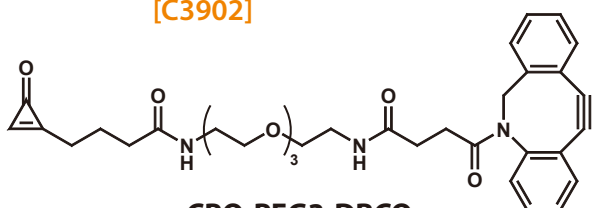
CPO-PFP
100mg / 500mg
[C3902]



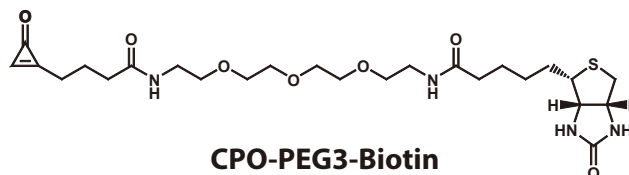
CPO-PEG3-Alkyne
10mg / 100mg
[C3904]



CPO-PEG3-azide
(ca. 0.2 mol/L in DMSO)
0.5mL
[C3948]



CPO-PEG3-DBCO
25mg
[C3916]



CPO-PEG3-Biotin
25mg
[C3903]

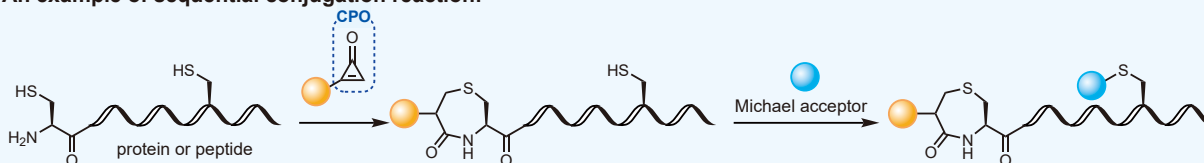
Advantages

- Incorporates a functional group to N-terminal cysteine residue in peptides and proteins selectively.
- Can be used for sequential conjugation in combination with click reactions.

An N-terminal cysteine residue (NCy) is a useful target for site-specific N-terminal labeling for protein synthesis. The cyclopropanone (CPO) group reacts specifically with the NCys of peptides and proteins to form bonds. The reaction is highly biocompatible and highly selective, independent of the presence of other cysteine residues in the peptide or protein or thiol groups in DL-dithiothreitol.

C3904, **C3948** and **C3916** have azido groups or alkyne moieties such as DBCO. Therefore, these reagents are useful for site-specific cysteine labeling of proteins and for sequential conjugation in combination with click reactions.

An example of sequential conjugation reaction:



Reference A. Istrate, G. J. L. Bernardes, et al., *J. Am. Chem. Soc.* **2022**, 23, 10396. <https://doi.org/10.1021/jacs.2c02185>

Related Product

Tris(2-carboxyethyl)phosphine Hydrochloride
DL-Dithiothreitol

1g / 5g / 25g [T1656]
1g / 5g / 25g [D1071]

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