

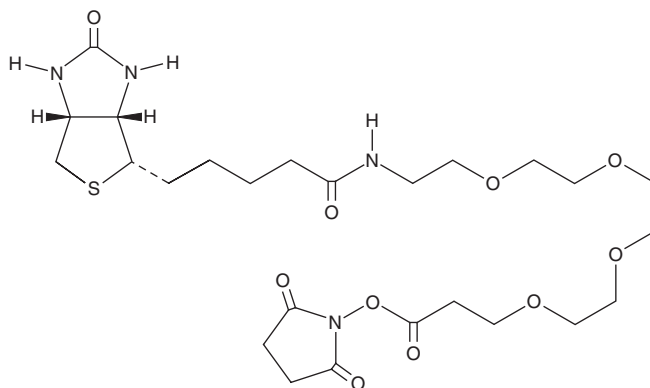
PRODUCT INFORMATION



Biotin-PEG₄-NHS ester

Item No. 29114

CAS Registry No.: 459426-22-3
Formal Name: 21-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-17-oxo-4,7,10,13-tetraoxa-16-azaheneicosanoic acid, 2,5-dioxo-1-pyrrolidinyl ester
Synonyms: NHS-PEO₄-Biotin, NHS-PEG₄-Biotin
MF: C₂₅H₄₀N₄O₁₀S
FW: 588.7
Purity: ≥90%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Biotin-PEG₄-NHS ester is supplied as a solid. A stock solution may be made by dissolving the biotin-PEG₄-NHS ester in the solvent of choice, which should be purged with an inert gas. Biotin-PEG₄-NHS ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of biotin-PEG₄-NHS ester in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of biotin-PEG₄-NHS ester can be prepared by directly dissolving the solid in aqueous buffers. The solubility of biotin-PEG₄-NHS ester in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Biotin-PEG₄-NHS ester is an amine reactive reagent that contains biotin linked via a four-unit PEG spacer to N-hydroxysuccinimide (NHS), which facilitates the coupling of biotin to primary amines.¹ Biotin-PEG₄-NHS ester has been used in the biotinylation of proteins and antibodies.^{2,3}

References

1. Smith, G.P. Kinetics of amine modification of proteins. *Bioconjug. Chem.* **17**(2), 501-506 (2006).
2. Evison, B.J., Palmer, J.T., Lambert, G., *et al.* A small molecule inhibitor of PCSK9 that antagonizes LDL receptor binding via interaction with a cryptic PCSK9 binding groove. *Bioorg. Med. Chem.* **28**(6), 115344 (2020).
3. Rajendran, M., Sun, W., Comella, P., *et al.* An immuno-assay to quantify influenza virus hemagglutinin with correctly folded stalk domains in vaccine preparations. *PLoS ONE* **13**(4), e0194830 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 04/10/2025

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM