bio-techne
TOCRIS

Print Date: May 15th 2023

Certificate of Analysis

www.tocris.com

Product Name: **Biotin-PEG3-Azide** **Catalog No.: 7524** **Batch No.: 2**

CAS Number: 875770-34-6

IUPAC Name: (3a*S*,4*S*,6a*R*)-*N*-[2-[2-[2-(2-Azidoethoxy)ethoxy]ethoxy]ethyl]hexahydro-2-oxo-1*H*-thieno[3,4-*d*]imidazole-4-pentanamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{32}N_6O_5S$

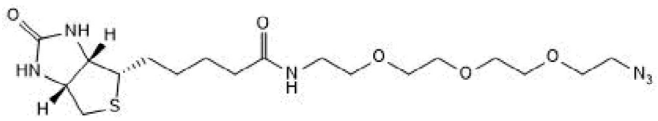
Batch Molecular Weight: 444.55

Physical Appearance: White solid

Solubility: DMSO to 100 mM
water to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 97.0% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **Biotin-PEG3-Azide** **Catalog No.: 7524** **2**

CAS Number: 875770-34-6

IUPAC Name: (3a*S*,4*S*,6a*R*)-*N*-[2-[2-[2-(2-Azidoethoxy)ethoxy]ethoxy]ethyl]hexahydro-2-oxo-1*H*-thieno[3,4-*d*]imidazole-4-pentanamide

Description:

Biotin-PEG3-Azide is a biotinylation reagent for labeling alkyne-containing biomolecules either via Cu(I)-catalyzed Azide-Alkyne Click Chemistry reaction (CuAAC) or via Cu(I)-free Strain-Promoted Alkyne-Azide Click Chemistry (SPAAC) reaction with cyclooctyne derivatives.

Physical and Chemical Properties:

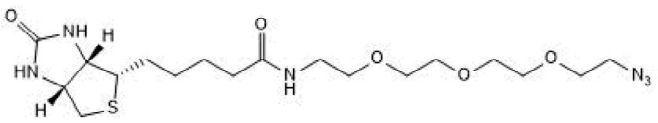
Batch Molecular Formula: $C_{18}H_{32}N_6O_5S$

Batch Molecular Weight: 444.55

Physical Appearance: White solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM
water to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Zhang *et al* (2021) Use of NAD tagSeq II to identify growth phase-dependent alterations in E. coli RNA NAD^+ capping. Proc.Natl.Acad.Sci.U.S.A. ***118*** e2026183118. PMID: 33782135.