

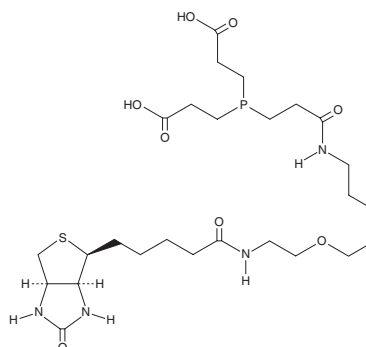
PRODUCT INFORMATION



TCEP-biotin

Item No. 25365

CAS Registry No.: 2227020-26-8
Formal Name: 4-(2-carboxyethyl)-22-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-7,18-dioxo-11,14-dioxo-8,17-diaza-4-phosphadocosanoic acid
Synonym: Tris(2-carboxyethyl)phosphine-biotin
MF: C₂₅H₄₃N₄O₉PS
FW: 606.7
Purity: ≥95%
Supplied as: A crystalline 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

TCEP-biotin is supplied as a crystalline solid. A stock solution may be made by dissolving the TCEP-biotin in the solvent of choice, which should be purged with an inert gas. TCEP-biotin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of TCEP-biotin in these solvents is approximately 25 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 TCEP-biotin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of TCEP-biotin in PBS, pH 7.2, is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

TCEP-biotin is biotinylated form of the reducing agent TCEP (Item No. 14329) and an affinity probe for protein lysine crotonylation.¹ Covalent addition of the TCEP moiety to crotonylated lysine residues results in adduct formation that allows for detection or immobilization of crotonylated proteins through interaction with the biotin ligand. It has been used in the detection and isolation of crotonylated histones in HEK293 cells.

Reference

1. Bos, J. and Muir, T.W. A chemical probe for protein crotonylation. *J. Am. Chem. Soc.* **140(14)**, 4757-1760 (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.

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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