bio-techne
TOCRIS

Print Date: Sep 4th 2025

Certificate of Analysis

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Product Name: **DBIA** **Catalog No.: 8142** **Batch No.: 1**

CAS Number: 2924824-04-2

IUPAC Name: (4*R*,5*S*)-*N*-[2-[(2-Iodoacetyl)amino]ethyl]-5-methyl-2-oxo-4-imidazolidinehexanamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{14}H_{25}IN_4O_3$

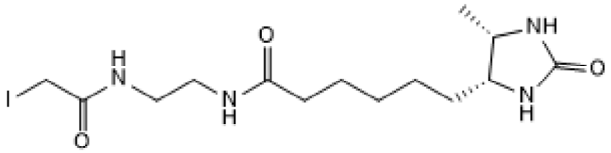
Batch Molecular Weight: 424.28

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 95.0% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

DBIA (desthiobiotin iodoacetamide) is a chemoproteomic reagent. DBIA is a cysteine reactive probe used to label and purify proteins by attaching desthiobiotin to cysteine residues in the protein of interest. DBIA can be used for targeted protein labeling and purification studies.

Physical and Chemical Properties:

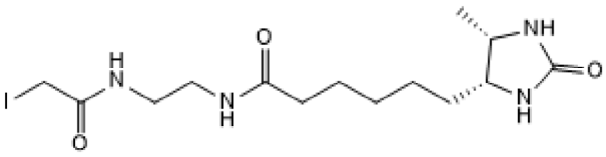
Batch Molecular Formula: $C_{14}H_{25}IN_4O_3$

Batch Molecular Weight: 424.28

Physical Appearance: Pale yellow solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Kuljanin *et al* (2021) Reimagining high-throughput profiling of reactive cysteines for cell-based screening of large electrophile libraries. Nat.Biotechnol. ***39*** 630. PMID: 33398154.