

Product Name: CycLuc 1

Catalog No.: 6823

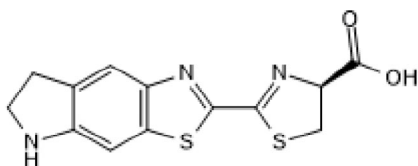
Batch No.: 1

CAS Number: 1247879-16-8

IUPAC Name: (4S)-2-(6,7-Dihydro-5H-pyrrolo[3,2-f]benzothiazol-2-yl)-4,5-dihydro-4-thiazolecarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₁₁N₃O₂S₂·½H₂O
Batch Molecular Weight: 314.38
Physical Appearance: Beige solid
Solubility: DMSO to 100 mM
 ethanol to 10 mM with gentle warming
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	49.67	3.85	13.37
Found	49.48	3.77	13.22

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

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Description:

CycLuc 1 is a synthetic luciferase substrate. Displays near-infrared (NIR) emission; peak luminescence at 599 nm. Suitable for use in in vivo bioluminescence imaging. Brain penetrant.

Physical and Chemical Properties:

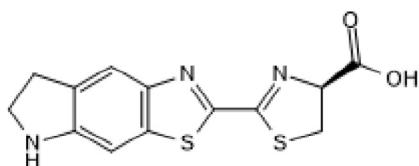
Batch Molecular Formula: C₁₃H₁₁N₃O₂S₂·½H₂O

Batch Molecular Weight: 314.38

Physical Appearance: Beige solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 10 mM with gentle warming

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:

Evans et al (2014) A synthetic luciferin improves bioluminescence imaging in live mice. *Nat.Methods.* **11** 393. PMID: 24509630.

Reddy et al (2010) Robust light emission from cyclic alkylaminoluciferin substrates for firefly luciferase. *J.Am.Chem.Soc.* **132** 13586. PMID: 20828122.

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