

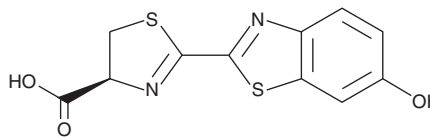
PRODUCT INFORMATION



D-Luciferin

Item No. 25836

CAS Registry No.: 2591-17-5
Formal Name: (4S)-4,5-dihydro-2-(6-hydroxy-2-benzothiazolyl)-4-thiazolecarboxylic acid
Synonym: Firefly Luciferin
MF: C₁₁H₈N₂O₃S₂
FW: 280.3
Purity: ≥95%
UV/Vis.: λ_{max}: 270, 332 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Special Conditions: Light sensitive and oxygen sensitive

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

Laboratory Procedures

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

Description

D-Luciferin is a chemiluminescent substrate of firefly luciferase.¹ It produces light upon oxidative decarboxylation by luciferase in the presence of ATP. D-Luciferin can be employed to assay the expression of the luciferase gene linked to a promoter of interest. Alternatively, D-luciferin and luciferase can be used to assess ATP availability in cellular or biochemical assays.

Reference

1. Lemberg, N. Firefly luciferase can use L-luciferin to produce light. *Biochem. J.* **317(1)**, 273-277 (1996).

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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