



LKT Laboratories, Inc.

D-Luciferin, firefly, Free Acid

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Product Information

Product ID L8008

CAS No. 2591-17-5

Chemical Name (4S)-2-(6-hydroxy-1,3-benzothiazol-2-yl)-4,5-dihydrothiazole-4-carboxylic acid

Synonym D(-)-Luciferin

Formula C₁₁H₈N₂O₃S₂

Formula Wt. 280.32

Melting Point

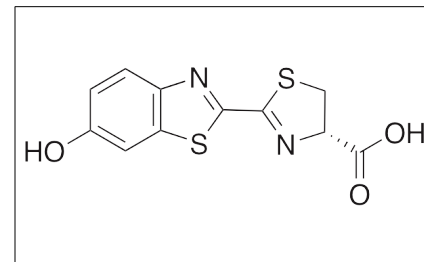
Purity ≥98%

Solubility Insoluble in water. Soluble in methanol.

Store Temp -20° C

Ship Temp Ambient

Description Luciferins are light-emitting heterocyclic compounds commonly used in biochemistry. Luciferin is the natural ligand for the enzyme luciferase, which oxidizes the substrate, emitting energy in the form of light in the process. Firefly luciferase requires ATP for its reaction, emitting a greenish-yellow luminescence at a peak wavelength of approximately 530 nm. The free acid form of luciferin requires addition of a dilute base such as NaOH or KOH to dissolve in water.



Bulk quantities available upon request

Product ID **Size**

L8008 5 mg

L8008 25 mg

References Hastings JW. Chemistries and colors of bioluminescent reactions: a review. *Gene* 1996;173(1 Spec No):5-11. PMID: 8707056.

Green A, McElroy WD. Function of adenosine triphosphate in the activation of luciferin. *Arch. Biochem. Biophys.* 1956 Oct;64(2):257-71. PMID: 13363432.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.