



LKT Laboratories, Inc.

D-Luciferin 1-(4,5-dimethoxy-2-nitrophenyl) Ethyl Ester

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## Product Information

Product ID L8009

CAS No. 223920-67-0

### Chemical Name

Synonym DMNPE-caged Luciferin

Formula  $C_{21}H_{19}N_3O_7S_2$

Formula Wt. 489.52

Melting Point

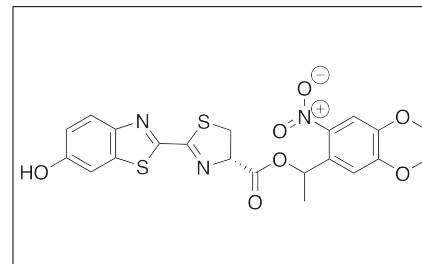
Purity  $\geq 95\%$

Solubility Soluble in DMSO or DMF

Store Temp  $-20^{\circ}C$

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. DMNPE-caged luciferin crosses cell membranes easily and can be used to study intracellular activities such as changes in gene transcription.



**Bulk quantities available upon request**

Product ID	Size
L8009	1 mg
L8009	5 mg
L8009	10 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.