

D-Luciferin, sodium salt

Catalog Number	Product Name	Packaging Size
C294	D-Luciferin, sodium salt	100 mg

Storage upon receipt: -20°C, protected from light

Introduction

Luciferins are a class of ATP-dependent substrates that are oxidized in the presence of the enzyme luciferase to produce oxyluciferin and energy in the form of light. Luciferin undergoes an enzyme-catalysed oxidation and the resulting unstable reaction intermediate emits light upon decaying to its ground state. This system is employed as a very useful reporter in plants, bacteria, and mammalian cells. Because chemiluminescent techniques are virtually background-free, this reporter gene system is ideal for detecting low-level gene expression.

HO S N CO₂H Luciferase HO S N S
$$+$$
 N $+$ N

Specifications

Product Name:	D-Luciferin, sodium salt	
Molecular Formula:	C ₁₁ H ₇ N ₂ NaO ₃ S ₂	
Molecular Weight:	302.30	
CAS Number:	103404-75-7	
Storage Conditions:	-20 °C, protected from light	
Shipping Condition:	Room Temperature	
Structure:	HO S N INC - O Na ⁺	

References:

- 1. Bacterial and Firefly Luciferase Genes in Transgenic Plants, Advantages and Disadvantages of a Reporter Gene.
 - Koncz C, et al.
 - Dev Genet (1990) 11:224-224
- 2. Investigation of the Interaction between Firefly Luciferase and Oxyluciferin or Its Analogues by Steady State and Subnanosecond Time-Resolved Fluorescence.Investigation of the Interaction between Firefly Luciferase and Oxyluciferin or Its Analogues by Steady State and Subnanosecond Time-Resolved Fluorescence.
 - Gandelman OA, et al.
 - J Photochem Photobiol B (1994) 22:203-203