

D-Luciferin, potassium salt

Catalog Number	Product Name	Packaging Size
C293	D-Luciferin, potassium 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 CO₂ + Write AMP + PPi O₂
$$CO_2$$

Specifications

Product Name:	D-Luciferin, potassium salt	
Molecular Formula:	$C_{11}H_7KN_2O_3S_2$	
Molecular Weight:	318.40	
CAS Number:	15144-35-9	
Storage Conditions:	-20 °C, protected from light	
Shipping Condition:	Room Temperature	
Structure:	HO S S C - O K+	

References:

 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
- 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