

Specification

D-Luciferin free acid

A1029

Physical Description:	Solid
Product Code:	A1029
Product Name:	D-Luciferin free acid
Specifications:	Assay (HPLC): min. 99 % Mol. absorption (1 %; MeOH; 329 nm): min. 17900 L/(mol cm) Water (K.F.): max. 1.0 %
WGK:	1
Storage:	-20°C protected from light
Shipment:	ambient temperature
Molecular Formula:	C ₁₁ H ₈ N ₂ O ₃ S ₂
M:	280.32 g/mol
CAS:	2591-17-5
EINECS:	219-981-3
CS:	29342080
Comment	The luciferase/luciferin assay system is one of the most sensitive reporter gene assays. Luciferase activity from a single microinjected cell can be determined. Therefore it is the assay system of choice for transfection assays with low transfection efficiencies. It is much more sensitive than CAT (approx. 1000X), non-radioactive and therefore less expensive and easier to perform. Luciferin as powder and aqueous solutions of Luciferin are stable at -20°C or -70°C (long-term storage). Aqueous solutions are usually made up as 25 mM stock solutions (100X) in water (A1006) or in 25 mM NaOH (A1029). Several times freezing and thawing of the stock solution does not influence the quality.
Bibliography	(1)DeLuca, M. & McElroy, W.D. (1978) <i>Methods Enzymol.</i> 57 , 3-15 Purification and properties of firefly luciferase. (2)Bowie, L.J. (1978) <i>Methods Enzymol.</i> 57 , 15-28 Synthesis of firefly luciferin and structural analogs. (3)Bronstein, I. <i>et al.</i> (1994) <i>Anal. Biochem.</i> 219 , 169-181 Chemiluminescent and bioluminescent reporter gene assays. (4)Janknecht, R. <i>et al.</i> (1995) <i>Oncogene</i> 10 , 1209-1216 SAP1a is a nuclear target of signaling cascades involving ERKs.

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