



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## Description

The In vivo-Luc™ imaging solution is a ready-to-use, sterilized, endotoxin-free solution of *D*-Luciferin for *in vivo* imaging of the expression of firefly luciferase. Real-time disease progress or drug efficacy in animals can be monitored in a non-invasive manner using the In vivo-Luc™ imaging solution.

## Background

Luciferases are enzymes that produce light when they oxidize their substrate. Oxidation of luciferin, the substrate for the most commonly used firefly (*Photinus pyralis*) luciferase, results in bioluminescence that can be accurately measured using a luminometer and is proportional to the amount of luciferase enzyme present in the system under study. The firefly luciferase reaction requires luciferin, plus adenosine triphosphate (ATP) and  $Mg^{2+}$  as cofactors, and when in the presence of  $O_2$ , emits a characteristic glow (Figure 1). Common biological experiments that utilize the luciferase reaction are promoter activity assays in which luciferase expression is under the control of a specific promoter, and cell line-derived xenograft (CDX) models in which constitutive luciferase expression allows for real-time, non-invasive monitoring of tumor growth and measurement of disease progression or drug efficacy.

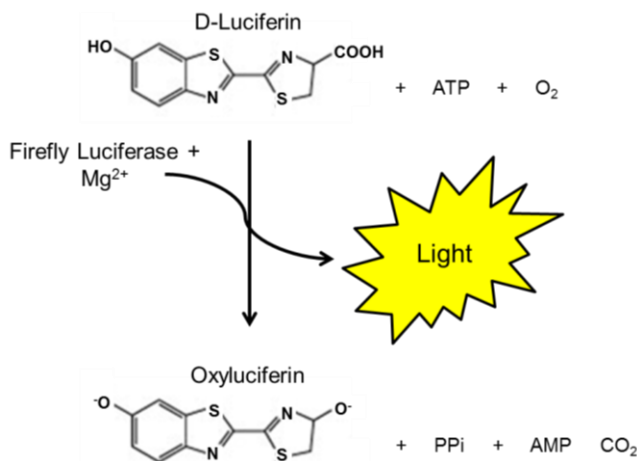


Figure 1. Bioluminescent Reaction Catalyzed by Luciferase.

## Application(s)

In vivo imaging of luciferase activity

## Formulation

15 mg/ml *D*-Luciferin in Dulbecco's phosphate-buffered saline (DPBS) sterilized and endotoxin free.

## Supplied Materials

Catalog #	Name	Amount	Storage
78803-1	Luciferase Reagent Substrate	5 ml (5 x 1 ml)	-20°C

## Important Product Information



Avoid exposing to excessive heat or light. Upon first thaw, prepare single-use aliquots and store at -20°C. Luciferin is very sensitive to multiple freeze/thaw cycles. Discard any unused product after thawing from aliquots.

**Storage Conditions**

Reagents will perform optimally for up to 6 months from date of receipt when the materials are stored as directed. Upon first thaw, prepare single-use aliquots and store at -20°C. Luciferin is very sensitive to multiple freeze/thaw cycles. Discard any unused product after thawing from aliquots.

**Safety**

This product is for research purposes only and not for human or therapeutic use. Overall, this product should be considered hazardous and harmful by inhalation, in contact with skin or eyes, and if swallowed. If contact occurs, wash thoroughly.

**Reference**

Eun, H. (1996). Marker/Reporter Enzymes. Elsevier EBooks, 567–645.

**Related Products**

<i>Products</i>	<i>Catalog #</i>	<i>Size</i>
Dual Luciferase Assay System	60683-1	10 ml
NF-κB reporter (Luc) - HEK293 Recombinant Cell line	60650	2 vials
Firefly Luciferase THP-1 Cell Line	78409	2 vials
Firefly Luciferase NALM6 Cell Line	78494	2 vials
Firefly Luciferase Raji Cell Line	78622	2 vials