

## Technical Data Sheet

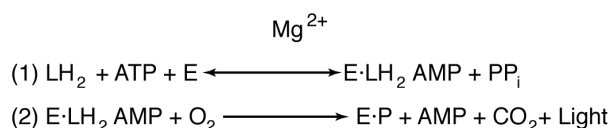
## D-Luciferin Potassium Salt

## Product Information

Material Number: 556878  
 Size: 50 mg

## Description

D-Luciferin, also known as beetle luciferin or (D-(-)-2-(6'-hydroxy-2'-benzothiazolyl)-thiazoline-4-carboxylic acid), has a formula weight of 318.41 and is a synthetically made substrate which can be catalyzed by firefly luciferase (enzymatic reaction shown below). D-Luciferin is lyophilized in the form of a monopotassium salt and has been purified by HPLC to remove dehydroluciferin and L-Luciferin, both of which are competitive inhibitors of firefly luciferase. It is important to note, however, that D-Luciferin can form dehydroluciferin in the presence of ultraviolet light and/or moisture. For this reason, prior to reconstitution, store in the dark at -20°C.



LH<sub>2</sub> = D-luciferin  
 E = Firefly luciferase  
 P = Oxyluciferin

## Preparation and Storage

Store lyophilized D-Luciferin at -20 °C in the dark.

Reconstitute lyophilized D-Luciferin with deionized water and bring the solution to a pH of 6.0 - 6.3 with HCl/NaOH. At a pH greater than 6.3, D-Luciferin may undergo a slow racemization from the D- to the L-isomer.

After reconstitution, store at 4 °C and protected from light for up to 2 weeks or alternatively, store at -20 °C for up to 1 year [aliquoted and protected from light].

## Application Notes

## Application

|             |                  |
|-------------|------------------|
| Luminometer | Routinely Tested |
|-------------|------------------|

## Suggested Companion Products

| Catalog Number | Name                          | Size      | Clone  |
|----------------|-------------------------------|-----------|--------|
| 556877         | D-Luciferin Potassium Salt    | 10 mg     | (none) |
| 556879         | D-Luciferin Potassium Salt    | 100 mg    | (none) |
| 556888         | D-Luciferin Potassium Salt    | 250 mg    | (none) |
| 556866         | Enhanced Luciferase Assay Kit | 100 tests | (none) |

## Product Notices

- Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.

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