

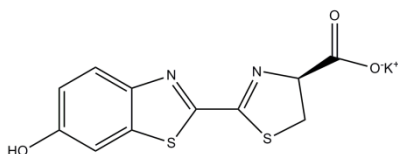
# D-Luciferin, Potassium Salt

**ALTERNATE NAMES:** (S)-2-(6-Hydroxy-2-benzothiazolyl)-2-thiazoline-4-carboxylic acid potassium salt, 4,5-Dihydro-2-(6-hydroxy-2-benzothiazolyl)-4-thiazolecarboxylic acid potassium salt, Firefly luciferin potassium salt

**CATALOG #:**

7903-100	100 mg
7903 1G	1 g
7903-3PK	3 x 1 g
7903-5PK	5 x 1 g
7903-10PK	10 x 1 g
7903 10G	10 g
7903-25G	25 g
7903-50G	50 g

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>11</sub>H<sub>7</sub>N<sub>2</sub>O<sub>3</sub>S<sub>2</sub>·K

**MOLECULAR WEIGHT:** 318.41

**CAS #:** 115144-35-9

**APPEARANCE:** Light yellow solid

**SOLUBILITY:** Water (~40 mg/ml)

**PURITY:** >99.8% by Chiral HPLC

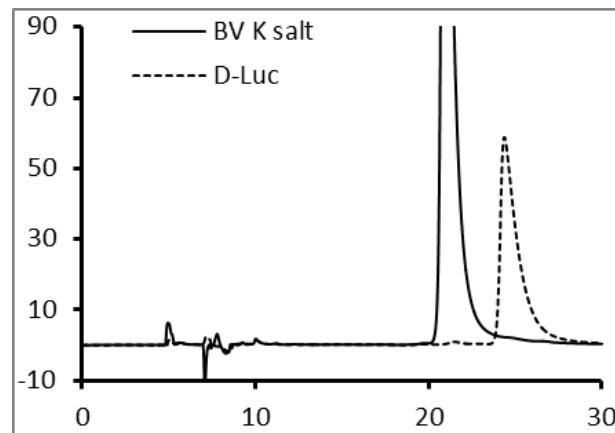
**STORAGE:** Store at -20°C. Protect from air and light

**DESCRIPTION:** D Luciferin potassium salt is a useful substrate for the enzyme Firefly Luciferase. Upon oxidation by the enzyme luciferase, produces bioluminescence. D-Luciferin can be utilized to assay the expression of the luciferase gene linked to a promoter of interest. Alternatively, D-Luciferin and luciferase can be used to assess ATP availability in cellular or biochemical assays.

**REFERENCES:**

1. Branchini, B.R., *et al.* (2004). *Biochemistry* **43**, 7255-7262.
2. Leskinen, P., *et al.* (2003). *Yeast* **20**, 1109-1113.
3. Caceres, G., *et al.* (2003). *Luminescence* **18**, 218-223.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.



**RELATED PRODUCTS:**

Coelenterazine, Native (**Cat. No. 2536-500, -1000**)  
 Coelenterazine -h (**Cat. No. 2742-250, -1000**)  
 ADP Colorimetric/Fluorometric Assay Kit (**Cat. No. K355-100**)  
 ADP/ATP Ratio Assay Kit (**K255-200**)  
 ATP Cell Viability Assay Kit (**Cat. No. K254-200**)  
 ATP Colorimetric/Fluorometric Assay Kit (**Cat. No. K354-100**)  
 Bioluminescence Cytotoxicity Assay Kit (**K312-500**)  
 Luciferase Polyclonal Antibody (**Cat. No. 3848-500**)  
 Luciferase Reporter Assay Kit (**K801-200**)  
 Luciferin Potassium Salt (**Cat. No. 7903-100, -1, -3, -5, -10, -10G**)  
 Luciferin Sodium Salt (**Cat. No. 7902-100, -1, -3, -5, -10, -10G**)  
 Luciferin (Free acid) (**Cat. No. 2779-250, -500, -1000, -500**)  
 StayBrite™ Highly Stable Recombinant Luciferase (**Cat. No. 7901-150**)  
 StayBrite™ Highly Stable Luciferase/Luciferin Reagent (**Cat. No. K790-100, -1000, -10,000**)  
 StayBrite™ Highly Stable ATP Assay Kit (**Cat. No. K791-100, -1000**)

**FOR RESEARCH USE ONLY! Not to be used on humans.**

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