

D-Luciferin (potassium salt)

| Catalog | Unit |
|--------------|-------|
| TBS0008-0.5G | 0.5 g |
| TBS0008-1G | 1 g |

Product Details

Formal Name: 4,5-dihydro-2-(6-hydroxy-2-benzothiazolyl)-4S-thiazolecarboxylic acid

Alternate Names: monopotassium salt

Molecular Formula: C₁₁H₇N₂O₃S₂ • K

Formula Weight: 318.4

CAS Number: 115144-35-9

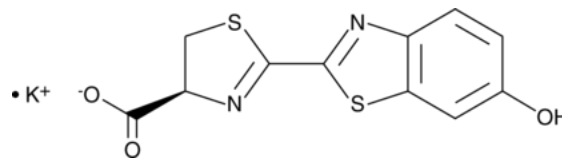
Purity: ≥95%

Formulation: A crystalline solid

Solubility: DMF: 16.7 mg/ml; DMSO: 10 mg/ml; Ethanol: 0.25 mg/ml; PBS (pH 7.2): 10 mg/ml

Storage: -20°C

Stability: ≥ 2 years



Applications

D-Luciferin serves as a chemiluminescent substance for firefly luciferase, generating light when oxidatively decarboxylated by the enzyme in the presence of ATP. It is useful for evaluating luciferase gene expression under specific promoters. Additionally, D-luciferin and luciferase are valuable for determining ATP levels in cellular or biochemical experiments.

Application Procedures

First dissolved in DMF (up to 16.7 mg/ml), or in DMSO (up to 10 mg/ml), or in Ethanol (up to 0.25 mg/ml), or in PBS (up to 10 mg/ml), then diluted to aqueous buffer. Solutions in DMF, DMSO, ethanol, or PBS may be stored at -20°C.

For research use only.