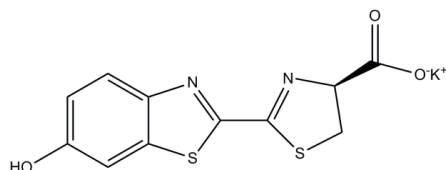


Bioluminescence Imaging Agent

Research Use Only. Not for use in diagnostic procedures.

XenoLight D-Luciferin, Potassium Salt Product Number: 122799

ALTERNATE NAME: (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



STRUCTURE:

MOLECULAR FORMULA: C₁₁H₇KN₂O₃S₂

MOLECULAR WEIGHT: 318.41

CAS#: 115144-35-9

APPEARANCE: Nearly white powder

SOLUBILITY: up to 40mg/ml in H₂O and Phosphate Buffered Saline

PURITY: >99% by HPLC

STORAGE: Store at -20°C. Protect from air and light. Keep container tightly closed.

Description: D-Luciferin is a chemical substance found in the cells of organisms that generate bioluminescence. When luciferin is oxidized under the catalytic effects of firefly luciferase and ATP, light is produced. Luciferin is able to penetrate cell membranes and can be used to monitor activity of cells of interest *in vivo* that have been transformed to express luciferase. Because the reaction with luciferase is ATP dependent, cellular viability can also be determined.

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 (e.g. skin, eyes, etc.). Avoid prolonged or repeated exposure.

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