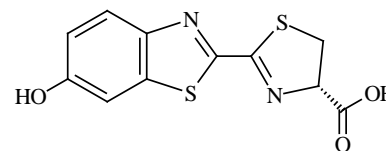


## PRODUCT AND SAFETY DATA SHEET

**PRODUCT NAME:** D-Luciferin, Free Acid**CATALOG #:** 10100/10100-1/10100-2**MOLECULAR INFORMATION:** C<sub>11</sub>H<sub>8</sub>N<sub>2</sub>O<sub>3</sub>S<sub>2</sub>.  
MW: 280.  
[2591-17-5]**PROPERTIES:****Color & Form**

Off-white solid.

**Purity**

≥ 99% by HPLC

**Solubility**

Readily soluble in DMSO. Slightly soluble in water. Avoid alkaline or strongly acidic solution.

**STORAGE AND HANDLING:**

Store desiccated at -20 °C. Protect from light.

**APPLICATION:**

Luciferin is a natural compound isolated from fireflies and is a substrate for the enzyme luciferase. Chemiluminescence at 560 nm is generated when luciferin is oxidized by an ATP-dependent process, catalyzed by luciferase. Luciferase is encoded by the *luc* gene, which is widely used as a reporter gene in a variety of cells. Because of the intrinsic low background of chemiluminescence technique, detection of the *luc* gene expression can be made at very low level. In addition, luciferin/luciferase has been used to measure 10<sup>-15</sup> molar quantity of ATP.

Ref: *BioTechniques* 7, 1116(1989); *Lett. Appl. Microbiol.* 1, 208(1990).**TOXICITY:**

Unknown.

**FIRST AID:**

Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

**Disclaimer:** Materials from Biotium are sold for research use only, and are not intended for food, drug, household, or cosmetic use. Biotium is not liable for any damage resulting from handling or contact with this product.