

D-Luciferin (Free Acid)

Catalog number BL-2025001

Key facts

CAS number 2591-17-5

Molecular weight 280.32 g/mol

Molecular formula C₁₁H₈N₂O₃S₂

Synonyms Firefly luciferin, beetle luciferin

SMILES O=C(O)C3CSC(c2nclccc(O)ccls2)=N3

InChiKey BJGNCJDXODQBOB-UHFFFAOYSA-N

IUPAC Name (4S)-2-(6-hydroxy-1,3-benzothiazol-2-yl)-4,5-dihydrothiazole-4-carbolxylic

acid

Quality specifications

Color White to almost white to faint yellow

Form Powder

Solubility Soluble in Methanol, DMSO

Purity (HPLC) ε 98%

Activity Very high. Tested using an in-house bioluminescence assay.

Retest period 3 years

Application examples

- o Bioluminescence imaging in in-vitro and in vivo assays
- o Gene expression studies using luciferase reporters
- o ATP detection and real-time cell viability assays
- o Tumor tracking and infectious disease research



Storage & Safety

Packaging The product is packed in an amber glass vial, sealed under argon with a

crimp cap.

Shipping The product is shipped at ambient temperature. Stability testing has

confirmed that short-term exposure to elevated temperatures does not

affect its activity or quality.

Storage Store in an airtight container at -20°C. Protect from light, moisture, and

oxygen.

Safety information This product is not classified as hazardous under REACH/CLP regulations.

For research use only. Not for human or veterinary use.

Warranty and Return Policy

This product is warranted to meet the specifications listed in this data sheet. If the product does not meet the specifications promised in this data sheet or the product is received in damaged condition, please contact customer support within 14 days for a resolution. Full details for terms and conditions can be found here: Terms & Conditions.