

D-Luciferin galactoside *CAS 131474-38-9*

Catalog number: 12513

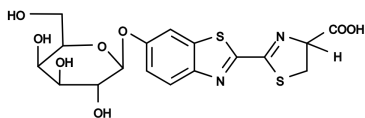
Unit size: 5 mg

Product Details

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Light yellow solid
Molecular Weight	442.46
Soluble In	DMSO
Chemical Structure	

**Applications**

D-Luciferin galactoside contains a beta-galactoside moiety attached at the 6-O-position, thus preventing it be recognized by the firefly luciferase enzyme. However, the galactose moiety is removed effectively by beta-galactosidase activity, and the resulted D-luciferin is well recognized by luciferase. D-Luciferin galactoside is a sensitive substrate for the chemiluminescent measurement of galactosidase activity in homogeneous assays, or in cell lysate samples in combination with luciferase and its cofactors. When used as a dual substrate, beta-galactosidase (LacZ gene) and luciferase levels can be determined with high sensitivity. When used in a model system expressing firefly luciferase, the luciferin is then utilized in a firefly luciferase reaction to generate light. It can also be used for in vivo bioluminescence imaging applications.