

Certificate of Analysis

Product Name: D-Luciferin Firefly, free acid
Cat #: L-123
CAS #: 2591-17-5
Lot #: Lot Specific
Retest Date: Lot Specific
Storage:[†] Store desiccated at -20°C. Protect from light.

Test	Specs	Results
Color	off-white to light yellow	slightly yellow
Form	powder	powder
Color of Solution (0.25% in methanol)	colorless to yellow	colorless
Turbidity (0.25% in methanol)	max. 2.0 NTU	0.2 NTU
Water Content (K. Fischer)	max. 2.0%	0.5%
Purity (HPLC)	min. 99.0 area-%	99.7 area-%
TLC (10 mg in 4 ml methanol; ethanol/ammonia 20:1; UV 254 nm)	corresponds to reference material	corresponds
Specific Optical Rotation [alpha] _D (c = 1 in DMF, 20°C)	-36.0 to -32.0	-34.0
Molar Extinction Coefficient (0.01 mg/ml methanol at 329 nm)	min. 17900 L/(mol cm)	18989 L/(mol cm)
Molar Extinction Coefficient (0.01 mg/ml methanol at 268 nm)	min. 6900 L/(mol cm)	7579 L/(mol cm)
FT-IR Spectrum	corresponds to reference spectrum	corresponds

* Gold Biotechnology, Inc. provides this Certificate of Analysis in good faith and to the best of its knowledge. It should not be substituted for the user's own raw material quality control. This material is for laboratory use only.

† Storage at listed temperature applies to retest date (if shown) or two years from purchase date. Check label for long term storage conditions, which may extend the product beyond the retest date and/or greater than two years from purchase.

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