

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-11-23 11:43:41
 Date of Next Testing: 2026-11-22 11:43:41
 Product Name: **D-Luciferin**
 CAS Number: 2591-17-5
 Specifications & Purity: $\geq 98\%$
 Lot #: K2211256
 SKU #: **D115508**
 Version: **1**
 Analysis #: **131627**
 Storage Temperature: Store at -20°C , Argon charged

Parameter	Limit Values	Result
Sulfur by Elemental Analysis(Anhydrous)	21.9-23.2 (%)	22.02800 %
Purity(HPLC)	98-100 (%)	99.28800 %
Water by Karl Fischer	0-3 (%)	1.06160 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in DMF})$	-34--30 ($^{\circ}$)	-30.52000 $^{\circ}$
Appearance (D115508)	White to off-white to light yellow powder	White to off-white to light yellow powder
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager