

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-03-05 10:40:57
 Date of Next Testing: 2028-03-04 10:40:57
 Product Name: **D-Luciferin**
 CAS Number: 2591-17-5
 Specifications & Purity: $\geq 98\%$
 Lot #: B2428158
 SKU #: **D115508**
 Version: **1**
 Analysis #: **262374**
 Storage Temperature: Store at -20°C , Argon charged

Parameter	Limit Values	Result
Sulfur by Elemental Analysis(Anhydrous)	21.9-23.2 (%)	22.52800 %
Purity(HPLC)	98-100 (%)	98.82600 %
Water by Karl Fischer	0-3 (%)	0.53950 %
Specific Rotation $[\alpha]_{20/D(c=1 \text{ in DMF})}$	-34--30 ($^{\circ}$)	-33.21000 $^{\circ}$
Appearance (D115508)	White to off-white to light yellow powder	White to off-white to light yellow powder
NMR Spectrum ^1H	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager