

## Certificate of Analysis

Date of Testing: 2023-09-13 10:02:51

Date of Next Testing: 2027-09-12 10:02:51

Product Name: **D-Tryptophan**

CAS Number: 153-94-6

Specifications &amp; Purity: 98%

Lot #: I2311734

SKU # **T105704****Analysis: 266139**

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.79200%
L-isomer	0-1 (%)	0.36%
Specific Rotation [α] <sub>20</sub> /D(c=1 in H <sub>2</sub> O)	29-33 (°)	31.17°
Nitrogen by Elemental Analysis	13.4-14.1 (%)	13.81%
Carbon by Elemental Analysis	63-67 (%)	64.52%
Appearance (T105704)	White to Off-White Powder	White to Off-White Powder
Solubility in 0.5 M HCl , Colorless to Dark Yellow Clear to Hazy,50mg/ml	pass	Pass
Proton NMR spectrum	Conforms to Structure	Conforms to Structure

John Su  
QA & QC Manager