

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-10-23 16:04:48

Date of Next Testing: 2027-10-23 16:04:48

Product Name: **(+)-Biotin-PFP-ester**

CAS Number: 120550-35-8

Specifications & Purity: $\geq 98\%$

Lot #: A2208195

SKU #: **B339204**

Version: **1**

Analysis #: **425500**

Storage Temperature: Store at -20°C , Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.29300 %
Melting point	190-194 ($^{\circ}\text{C}$)	193.84800 $^{\circ}\text{C}$
Specific rotation $[\alpha]_{20/D}(c=1\% \text{ in DMF})$	39-43 ($^{\circ}$)	42.11600 $^{\circ}$
Appearance (B339204)	White to Almost white powder to crystal	White to Almost white powder to crystal
Proton NMR spectrum	Conforms to structure	Conforms to Structure

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager