

## Certificate of Analysis

Date of Testing: 2022-12-13 11:30:37  
Date of Next Testing: 2026-12-12 11:30:37  
Product Name: **Ala-Tyr**  
CAS Number: 3061-88-9  
Specifications & Purity:  $\geq 98.0\%$ (HPLC)  
Lot #: L2208229  
SKU #: **A121379**  
**Analysis:** **144742**  
Storage Temperature: Store at  $-20^{\circ}\text{C}$

Parameter	Limit Values	Result
Carbon by Elemental Analysis	55.4-58.8 (%)	56.38 %
Nitrogen by Elemental Analysis	10.7-11.4 (%)	10.96 %
Water by Karl Fischer	0-20 (%)	3.62 %
Specific Rotation $[\alpha]_{20}^D(c=2 \text{ in } 5\text{mol/L HCl})$	21-23 ( $^{\circ}$ )	23.00 $^{\circ}$
Purity(HPLC)	98-100 (%)	98.00000 %
Appearance (A121379)	white powder	White powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility,50 mg/mL, H <sub>2</sub> O	Colorless Clear	Colorless Clear



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QA & QC Manager