



**CERTIFICATE OF ANALYSIS**

Product Name: Fmoc-3-(2-Naphthyl)-D-Alanine Lot No.: GLS160322-20112  
CAS No.: 138774-94-4 Store at: Cool dry place(<25°C)  
Molecular Formula: C<sub>28</sub>H<sub>23</sub>NO<sub>4</sub> Molecular Weight: 437.5  
Manufacturing Date: 2016-3-22 Retest Date: 2017-9-22  
Melting Point: 159.5-161.6°C

Tests	Specifications	Results
Appearance	White to off white powder	Complies
Purity(HPLC)	≥98%	99.96%
TLC	≥98%	>98%
Optical Purity	≤0.5% L-enantiomer	0.0309%
Optical Rotation	+15°±3°(C=1 in DMF)	+16.5°(C=1 in DMF)
Clarity of solution	0.3 gram in 2ml DMF clear solution	Complies
Element analysis(C、N、H)	≤5.0%	<5.0%
Water Content(K.F.)	≤2.0%	0.277%
Loss on drying	≤2.0%(80°C,2h)	0.86%
IR Spectrum	In accordance with the standard	Complies
Mass Spectrum	In accordance with the standard	Complies
NMR Spectrum	In accordance with the standard	Complies

GL Biochem warrants material of said quality at the time of sale. It is the sole responsibility of the customers to determine the adequacy of all materials for any intended or specific purpose or use. GL's sole obligation is to replace the material up to the extent of the purchase price. This warranty applies only to products in original packaging and does not apply to a product which has been tampered with or altered in any way or which has been misused or damaged by accident or negligence. All claims must be received in writing (by fax or email) within **30 days from date when product arrive at the destination city** and failure to do so shall constitute a waiver by customers for any and all such claims.

Prepared and Checked by:

Lu Yan (QA/QC)\_\_\_\_\_

Date: 2016-4-8



**Should you have any question or request about GLB's products and service, please feel free to contact:**

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