

## Analytical Data Sheet

Lot number **1069289**  
not for drug use

Catalog number **B-1665.0001**  
Product number **4009752.0001**  
Product **Fmoc-β-(2-thienyl)-Ala-OH**  
Molecular formula **C<sub>22</sub>H<sub>19</sub>NO<sub>4</sub>S**  
Relative molecular mass **393.46**

Tests	Results								
Appearance of solution	clear, colorless solution (50 mg/mL in dioxane) clear, colorless solution (0.5 mmol/mL in DMF)								
Identification (elemental analysis)	<table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 67.2%</td> <td>C = 67.2%</td> </tr> <tr> <td>H = 4.9%</td> <td>H = 4.9%</td> </tr> <tr> <td>N = 3.6%</td> <td>N = 3.5%</td> </tr> </tbody> </table>	Theory	Found	C = 67.2%	C = 67.2%	H = 4.9%	H = 4.9%	N = 3.6%	N = 3.5%
Theory	Found								
C = 67.2%	C = 67.2%								
H = 4.9%	H = 4.9%								
N = 3.6%	N = 3.5%								
Identification (TLC)	complies with authentic material								
Melting point	172 °C								
Specific optical rotation	$[\alpha]_D^{24} = +17.9^\circ$ (1% in dioxane) $[\alpha]_{436}^{24} = +39.4^\circ$ (1% in dioxane)								
Purity (HPLC)	99.7% (TFA)								
Related impurities (HPLC)	not det. Fmoc-β-Ala-OH								
Purity (TLC)	> 99%								
Related impurities (TLC)	< 0.1% H-β-(2-thienyl)-Ala-OH								
TLC conditions	chloroform/methanol/toluene/H <sub>2</sub> O 8/8/8/1 toluene/dioxane/acetic acid 95/25/4 chloroform/methanol/acetic acid 90/8/2 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, TMB								
Enantiomer content (chiral chromatography)	< 0.1% D-enantiomer								
Assay (titration)	99.2% (TBAH)								
Acetic acid content (IC)	< 0.002% (LOQ)								