

## Analytical Data Sheet

Lot number **1069494**  
not for drug use

Catalog number **B-1235.0025**  
Product number **4003086.0025**  
Product **Fmoc- Ser(tBu) - OH**  
Molecular formula  $C_{22}H_{25}NO_5$   
Relative molecular mass 383.44

Tests	Results
Appearance	white powder
Appearance of solution	clear, colorless solution (50 mg/mL in methanol) clear solution (0.5 mmol/mL in DMF)
Identification (TLC)	complies with authentic material
Melting point	131 °C
Specific optical rotation	$[\alpha]_D^{24} = +25.9^\circ$ (1% in ethyl acetate)
Purity (HPLC)	99.9% (TFA)
Related impurities (HPLC)	not det. Fmoc-β-Ala-OH not det. Fmoc-β-Ala-Ser(tBu)-OH not det. Fmoc-Ser(tBu)-Ser(tBu)-OH < 0.1% Fmoc-Ser-OH
Purity (TLC)	> 99%
Related impurities (TLC)	< 0.05% H-Ser(tBu)-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 85/10/5 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, TMB
Other amino acids (GC)	< 0.2% each
Enantiomer content (chiral chromatography)	not det. < 0.007% (LOD) D-enantiomer
Assay (titration)	100.0% (TBAH)
Water content (KF volumetric)	0.1%
Acetic acid content (IC)	0.002%

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Latest update: January 16, 2017

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