

## Analytical Data Sheet

Lot number **1000001259**  
not for drug use

Catalog number **B-1235.0100**  
Product number **4003086.0100**  
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 solution (0.5 mmol/mL in DMF)
Identification (ESI-MS)	383.2u(monoisotopic mass)
Identification (TLC)	Rf value in agreement with authentic material
Specific optical rotation	$[\alpha]_D^{24} = + 25.8^\circ$ (1% in ethyl acetate)
Purity (HPLC)	99.98% (TFA)
Related impurities (HPLC)	< LOQ Fmoc- $\beta$ -Ala-OH not det. Fmoc- $\beta$ -Ala-Ser(tBu)-OH not det. Fmoc-Ser(tBu)-Ser(tBu)-OH < LOQ Fmoc-Ser-OH $\leq 0.02\%$ each single unspecified
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)	< 0.20% each
Enantiomer content (chiral chromatography)	0.02%Fmoc-D-Ser(tBu)-OH
Assay (titration)	99.6% (TBAH)
Water content (KF volumetric)	0.2%
Acetic acid content (IC)	< 20mg/kg

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Latest update: June 06, 2018

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