

Analytical Data Sheet

Lot number **1065122**
not for drug use

Catalog number **B-1245.0005**
Product number **4096755.0005**
Product **Fmoc- Thr(tBu) - OH**
Molecular formula $C_{23}H_{27}NO_5$
Relative molecular mass 397.47

Tests	Results
Appearance	white, fine powder
Appearance of solution	clear, colorless solution (50 mg/mL in methanol) clear, colorless solution (0.5 mmol/mL in DMF)
Identification (TLC)	complies with authentic material
Melting point	133 °C
Specific optical rotation	$[\alpha]_D^{24} = -5.7^\circ$ (1% in DMF) $[\alpha]_D^{24} = +15.8^\circ$ (1% in ethylacetate)
Purity (HPLC)	99.9% (TFA)
Related impurities (HPLC)	not det. Fmoc- β -Ala-OH < 0.1% Fmoc- β -Ala-Thr(tBu)-OH not det. Fmoc-Thr-OH not det. Fmoc-Thr(tBu)-Thr(tBu)-OH
Purity (TLC)	> 99%
Related impurities (TLC)	< 0.05% H-Thr(tBu)-OH
TLC conditions	chloroform/methanol/toluene/H ₂ O 8/8/8/1 chloroform/methanol/acetic acid 85/10/5 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, TMB
Enantiomer content (GC)	> 99.7% L-Threonine < 0.1% D-Threonine \leq 0.1% D-allo-Threonine \leq 0.1% L-allo-Threonine
Other amino acids (GC)	< 0.2%
Assay (titration)	99.5% (TBAH)
Water content (KF volumetric)	0.2%

Acetic acid content (IC)

0.003%

Latest update: April 06, 2016

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