

Analytical Data Sheet

Lot number

1044683

not for drug use

Catalog Number	B-1260.0025
Product number	4006924.0025
Product	Fmoc- D- Tyr(tBu) - OH
Molecular formula	C ₂₈ H ₂₉ NO ₅
Relative molecular mass	459.54

Tests	Results								
Appearance	white powder								
Appearance of solution	clear, colorless solution (50 mg/mL in methanol) essentially clear solution (0.5 mmol/mL in DMF)								
Identification (elemental analysis)	<table border="0"> <tr> <td>Theory</td> <td>Found</td> </tr> <tr> <td>C = 73.2%</td> <td>C = 73.0%</td> </tr> <tr> <td>H = 6.4%</td> <td>H = 6.5%</td> </tr> <tr> <td>N = 3.1%</td> <td>N = 3.1%</td> </tr> </table>	Theory	Found	C = 73.2%	C = 73.0%	H = 6.4%	H = 6.5%	N = 3.1%	N = 3.1%
Theory	Found								
C = 73.2%	C = 73.0%								
H = 6.4%	H = 6.5%								
N = 3.1%	N = 3.1%								
Identification (TLC)	complies with authentic material								
Melting point	152 °C								
Specific optical rotation	$[\alpha]_D^{24} = +28.2^\circ$ (1 % in dimethylformamide)								
Purity (HPLC)	99.4% (TFA)								
Related impurities (HPLC)	not det. Fmoc-β-Ala-OH < 0.1% Fmoc-D-Tyr-OH not det. Fmoc-β-Ala-D-Tyr(tBu)-OH < 0.1% Fmoc-D-Tyr(tBu)-D-Tyr(tBu)-OH								
Purity (TLC)	> 99%								
Related impurities (TLC)	< 0.1% H-D-Tyr(tBu)-OH								
TLC conditions	chloroform/methanol/acetic acid 90/8/2 chloroform/methanol/toluene/H ₂ O 8/8/8/1 toluene/dioxane/acetic acid 95/25/4 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, TMB								
Other amino acids (GC)	< 0.3%								
Enantiomer content (chiral chromatography)	0.1% L-enantiomer								
Assay (elemental analysis)	99.4% (Cth 73.18%, Cfd 72.73%)								



Assay (titration)	99.4% (TBAH)
Water content (KF volumetric)	0.1%
Acetic acid content (IC)	0.010%

Latest update: September 26, 2012

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