

Analytical Data Sheet

Lot number **1000001081**
not for drug use

Catalog number **A-2165.0025**
Product number **4000781.0025**
Product **Boc- D- Phe- OH**
Molecular formula $C_{14}H_{19}NO_4$
Relative molecular mass 265.31

Tests	Results
Appearance	white powder
Appearance of solution	clear, colorless solution (50 mg/mL in methanol) clear, colorless solution (0.5 mmol/mL in DMF)
Identification (elemental analysis)	Theory Found C = 63.4% C = 63.2% H = 7.2% H = 7.3% N = 5.3% N = 5.3%
Identification (TLC)	complies with authentic material
Kaiser test	negative
Melting point	89 °C
Specific optical rotation	$[\alpha]_D^{24} = -25.6^\circ$ (2% in ethanol abs.)
Purity (TLC)	> 99%
Related impurities (TLC)	< 0.05% Boc-D-Phe-D-Phe-OH < 0.1% H-D-Phe-OH < 0.05% Boc-D-Tyr-OH
TLC conditions	chloroform/methanol/acetic acid/H ₂ O 90/10/0.5/1 chloroform/ethylacetate/acetic acid 90/10/2 toluene/dioxane/acetic acid 95/25/4 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, TMB
Enantiomer content (GC)	< 0.1% L-enantiomer
Assay (titration)	99.7%