

Analytical Data Sheet

Lot number **1000012970**
not for drug use

Catalog number **A-1465.0100**
Product number **4001265.0100**
Product **Boc- Lys(Z) - OH**
Molecular formula $C_{19}H_{28}N_2O_6$
Relative molecular mass 380.44

Tests	Results
Appearance	white powder
Appearance of solution	clear, colorless solution (50 mg/mL in methanol)
Identification (MS)	m = 380.2u (monoisotopic mass)
Identification (elemental analysis)	Theory Found C = 60.0% C = 59.9% H = 7.4% H = 7.3% N = 7.4% N = 7.4%
Identification (TLC)	Rf value in agreement with authentic material
Melting point	75 °C
Specific optical rotation	$[\alpha]_D^{24} = -12.0^\circ$ (1% in DMF)
Purity (TLC)	> 99%
Related impurities (TLC)	< 0.1% H-Lys(Z)-OH < 0.1% Boc-Lys(Z)-Lys(Z)-OH
TLC conditions	n-butanol/acetic acid/H ₂ O 4/2/2 toluene/dioxane/acetic acid 95/25/4 chloroform/methanol/toluene/H ₂ O 8/8/8/1 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, TMB
Enantiomer content (GC)	< 0.10% D-enantiomer
Assay (titration)	100.0% (TBAH)
Water content (KF volumetric)	0.1%