

Analytical Data Sheet

Lot number **1067128**
not for drug use

Catalog number **B-1460.0005**
Product number **4007570.0005**
Product **Fmoc- D- Val- OH**
Molecular formula $C_{20}H_{21}NO_4$
Relative molecular mass 339.39

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 (TLC)	complies with authentic material
Melting point	146.2 °C
Specific optical rotation	$[\alpha]_D^{24} = +17.3^\circ$ (1% in DMF) $[\alpha]_{436}^{24} = +40.4^\circ$ (1% in DMF)
Purity (HPLC)	99.9% (TFA)
Related impurities (HPLC)	< 0.1% Fmoc- β -Ala-OH < 0.1% Fmoc-D-Val-D-Val-OH < 0.1% Fmoc- β -Ala-D-Val-OH
Purity (TLC)	> 99%
Related impurities (TLC)	< 0.1% H-D-Val-OH
TLC conditions	chloroform/ethylacetate/acetic acid 50/50/2 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 (chiral chromatography)	< 0.1% L-enantiomer
Assay (titration)	99.1% (TBAH)
Water content (KF volumetric)	0.2%
Acetic acid content (IC)	0.011%