

Analytical Data Sheet

Lot number **1000012020**
not for drug use

Catalog number **B-1570.0005**
Product number **4011444.0005**
Product **Fmoc- His(1- Trt) - OH**
Molecular formula $C_{40}H_{33}N_3O_4$
Relative molecular mass 619.72

Tests	Results
Appearance	white powder
Appearance of solution	essentially clear solution (0.5 mmol/mL in DMF)
Identification (ESI-MS)	m = 619.2u (monoisotopic mass)
Identification (TLC)	Rf value in agreement with authentic material
Specific optical rotation	$[\alpha]_D^{24} = +24.5^\circ$ (1% in dioxane) (corrected for assay)
Purity (HPLC)	99.69% (TFA)
Related impurities (HPLC)	0.16% Fmoc-His(1-Trt)-His(1-Trt)-OH 0.05% Fmoc-His-OH < 0.02% (LOQ) Fmoc- β -Ala-His(1-Trt)-OH < 0.02% (LOQ) Fmoc- β -Ala-OH \leq 0.04% each single unspecified
Purity (TLC)	> 99%
Related impurities (TLC)	< 0.05% H-His(1-Trt)-OH TLC conditions: ethylacetate/pyridine/acetic acid/H ₂ O 60/20/6/11 chloroform/methanol/acetic acid 77.5/15/7.5 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, TMB
Other amino acids (GC)	< 0.20%
Enantiomer content (chiral chromatography)	0.02% D-enantiomer
Assay (titration)	99.6% (TBAH)
Water content (KF volumetric)	0.3%
Acetic acid content (IC)	< 20 mg/kg AcOH (< LOQ)

Residual organic solvents (GC)

dichloromethane detected (LOD 144 mg/kg, LOQ 479 mg/kg)
ethanol 2.8211% (LOD 91 mg/kg, LOQ 305 mg/kg)
ethyl acetate not det. (< LOD)
(LOD 53 mg/kg, LOQ 176 mg/kg)

Latest update: February 06, 2019

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Lot number **100012020**