

## Analytical Data Sheet

Lot number **1070452**  
not for drug use

Catalog number **B-1710.0001**  
Product number **4014118.0001**  
Product **Fmoc- D- 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	clear, colorless solution (50 mg/mL in dioxane) clear, colorless solution (0.5 mmol/mL in DMF)
Identification (TLC)	complies with authentic material
Specific optical rotation	$[\alpha]_D^{24} = -26.8^\circ$ (1% in dioxane) (corrected for assay)
Purity (HPLC)	99.9% (TFA)
Related impurities (HPLC)	< 0.1% Fmoc- $\beta$ -Ala-OH not det. Fmoc- $\beta$ -Ala-D-His(1-Trt)-OH not det. Fmoc-D-His(1-Trt)-D-His(1-Trt)-OH
Purity (TLC)	> 99%
Related impurities (TLC)	< 0.2% H-D-His(1-Trt)-OH
TLC conditions	chloroform/methanol/acetic acid/H <sub>2</sub> O 45/13/1/2 ethylacetate/pyridine/acetic acid/H <sub>2</sub> O 60/10/3/4 chloroform/methanol/toluene/H <sub>2</sub> O 8/8/8/1 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, TMB
Enantiomer content (GC)	< 0.2% L-enantiomer
Assay (titration)	94.7% (TBAH)
Water content (KF volumetric)	0.2%
Acetic acid content (IC)	0.0025%

## Residual organic solvents (GC)

not det. dioxane (LOQ 61 mg/kg, LOD 18 mg/kg)  
not det. tert. butylmethylether (LOQ 46 mg/kg, LOD 14 mg/kg)  
0.015% tetrahydrofuran (LOQ 50 mg/kg, LOD 15 mg/kg)  
not det. isopropylether (LOQ 40 mg/kg, LOD 12 mg/kg)  
0.027% ethylacetate (LOQ 69 mg/kg, LOD 21 mg/kg)  
5.45% ethanol (LOQ 52 mg/kg, LOD 15 mg/kg)  
0.008% toluene (LOQ 23 mg/kg, LOD 7 mg/kg)  
0.28% dimethylformamide (LOQ 38 mg/kg, LOD 11 mg/kg)

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Latest update: March 02, 2017

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