

## Analytical Data Sheet

Lot number **1070182**  
not for drug use

Catalog number **C-1560.0100**  
Product number **4000114.0100**  
Product **Z- Glu- OH**  
Molecular formula  $C_{13}H_{15}NO_6$   
Relative molecular mass 281.27

Tests	Results
Appearance	white powder
Appearance of solution	clear, colorless solution (50 mg/mL in methanol)
Identification (TLC)	complies with authentic material
Melting point	121 °C
Specific optical rotation	$[\alpha]_D^{24} = -7.6^\circ$ (5% in acetic acid)
Purity (HPLC)	99.2% (TFA)
Purity (TLC)	> 99%
Related impurities (TLC)	< < 0.1% Z-Glu-Glu-OH < < 0.1% H-Glu-OH
TLC conditions	ethylacetate/pyridine/acetic acid/H <sub>2</sub> O 60/20/6/11 chloroform/methanol/acetic acid/H <sub>2</sub> O 45/13/1/2 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, TMB
Enantiomer content (GC)	< 0.1% D-enantiomer
Other amino acids (GC)	< 0.2%
Assay (titration)	99.8% (TBAH)
Water content (KF volumetric)	0.2%

Latest update: February 15, 2017

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