

Analytical Data Sheet

Lot number

1040066

not for drug use

Catalog Number	C-1615.0100
Product number	4001309.0100
Product	Z- Gln- OH
Molecular formula	$C_{13}H_{16}N_2O_5$
Relative molecular mass	280.28

Tests	Results
Appearance	white powder
Appearance of solution	clear, colorless solution (50 mg/mL in methanol)
Identification (TLC)	complies with authentic material
Melting point	138 °C
Specific optical rotation	$[\alpha]_D^{24} = -5.3^\circ$ (2% in ethanol) $[\alpha]_{365}^{24} = -12.3^\circ$ (2% in ethanol)
Purity (TLC)	> 99%
Related impurities (TLC)	$\leq 0.2\%$ Z-Gln-Gln-OH < 0.2% Z-Glu-OH < 0.1% H-Gln-OH
TLC conditions	chloroform/methanol/acetic acid 77.5/15/7.5 ethylacetate/pyridine/acetic acid/H ₂ O 60/30/9/16.5 chloroform/methanol/acetic acid 32% 5/3/1 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, TMB
Enantiomer content (GC)	< 0.1% D-enantiomer
Other amino acids (GC)	< 0.3%
Assay (titration)	99.0% (TBAH)
Water content (KF volumetric)	0.3%
Latest update: January 03, 2012	