

# Analytical Data Sheet

Lot number

## 1046823

not for drug use

<b>Catalog Number</b>	C-1615.0025
<b>Product number</b>	4001309.0025
<b>Product</b>	Z- Gln- OH
<b>Molecular formula</b>	C <sub>13</sub> H <sub>16</sub> N <sub>2</sub> O <sub>5</sub>
<b>Relative molecular mass</b>	280.28

Tests	Results
<b>Appearance</b>	white powder
<b>Appearance of solution</b>	clear, colorless solution (50 mg/mL in methanol)
<b>Identification (TLC)</b>	complies with authentic material
<b>Melting point</b>	138 °C
<b>Specific optical rotation</b>	[α] <sub>D</sub> <sup>24</sup> = - 5.3° (2% in ethanol) [α] <sub>365</sub> <sup>24</sup> = - 12.3° (2% in ethanol)
<b>Purity (TLC)</b>	> 99%
<b>Related impurities (TLC)</b>	≤ 0.2% Z-Gln-Gln-OH < 0.2% Z-Glu-OH < 0.1% H-Gln-OH
<b>TLC conditions</b>	chloroform/methanol/acetic acid 77.5/15/7.5 ethylacetate/pyridine/acetic acid/H <sub>2</sub> O 60/30/9/16.5 chloroform/methanol/acetic acid 32% 5/3/1 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, TMB
<b>Enantiomer content (GC)</b>	< 0.1% D-enantiomer
<b>Other amino acids (GC)</b>	< 0.3%
<b>Assay (titration)</b>	99.0% (TBAH)
<b>Water content (KF volumetric)</b>	0.3%
Latest update: February 11, 2013	