

## Analytical Data Sheet

Lot number **1073424**  
not for drug use

Catalog number **C-2975.0025**  
Product number **4000138.0025**  
Product **Z- Arg(Z)<sub>2</sub>- OH**  
Molecular formula **C<sub>30</sub>H<sub>32</sub>N<sub>4</sub>O<sub>8</sub>**  
Relative molecular mass **576.61**

Tests	Results
Appearance	white powder
Appearance of solution	clear, colorless solution (50 mg/mL in methanol)
Identification (ESI-MS)	m = 576.6u (average mass)
Identification (TLC)	complies with authentic material
Specific optical rotation	$[\alpha]_D^{24} = + 15.7^\circ$ (2% in chloroform)
Purity (HPLC)	98.3% (TFA)
Purity (TLC)	> 98%
Related impurities (TLC)	0.2% Z-Arg(Z) <sub>2</sub> -NH <sub>2</sub> < 1% Z-Arg(Z)-OH < 0.5% unknown impurities
TLC conditions	chloroform/methanol/toluene/H <sub>2</sub> O 8/8/8/1 chloroform/methanol/acetic acid 85/10/5 ethylacetate/pyridine/acetic acid/H <sub>2</sub> O 60/10/3/4 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, TMB
Enantiomer content (chiral chromatography)	not det. (< 0.007% LOD) D-enantiomer
Assay (titration)	99.5% (TBAH)

Latest update: September 18, 2017

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