

Analytical Data Sheet

Lot number

1043966

not for drug use

Catalog Number	C-4210.0001
Product number	4044802.0001
Product	Z- D- allo- Thr(tBu) - OH · DCHA
Molecular formula	C ₁₆ H ₂₃ NO ₅ · C ₁₂ H ₂₃ N
Relative molecular mass	490.68

Tests	Results								
Appearance	white powder								
Appearance of solution	clear, colorless solution (50 mg/ml in MeOH)								
Identification (elemental analysis)	<table border="0"> <tr> <td>Theory</td> <td>Found</td> </tr> <tr> <td>C = 68.5 %</td> <td>C = 68.3 %</td> </tr> <tr> <td>H = 9.5 %</td> <td>H = 9.6 %</td> </tr> <tr> <td>N = 5.7 %</td> <td>N = 5.6 %</td> </tr> </table>	Theory	Found	C = 68.5 %	C = 68.3 %	H = 9.5 %	H = 9.6 %	N = 5.7 %	N = 5.6 %
Theory	Found								
C = 68.5 %	C = 68.3 %								
H = 9.5 %	H = 9.6 %								
N = 5.7 %	N = 5.6 %								
Identification (TLC)	conforms with authentic material								
Melting point	182 °C								
Specific optical rotation	$[\alpha]_D^{24} = -12.6^\circ$ (1 % in MeOH)								
Purity (TLC)	> 99%								
TLC conditions	chloroform/methanol/acetic acid 90/8/2 toluene/dioxane/acetic acid 95/25/4 chloroform/methanol/toluene/H ₂ O 8/8/8/1 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, chlorine-tolidine								
Enantiomer content (GC)	0.1% L-Threonin < 0.1% D-Threonin < 0.1% L-allo-Threonin > 99.7% D-allo-Threonin								
Assay (elemental analysis)	99.6% (Cth 68.54 %, Cfd 68.27 %)								
Water content (KF volumetric)	0.1%								
Latest update: July 31, 2012									