Chem-Impex International, Inc.

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Certificate of Analysis

Catalog Number	23053
Product Name	(+)-Biotin-PFP-ester
Lot Number	071109
Molecular Formula	$C_{16}H_{15}N_2SO_3F_5\\$
Molecular Weight	410.36
Appearance	White solid
Melting Point	195 °C
Analysis (TLC)	One spot
Toluene/Dioxane/Acetic Acid	$R_f = 0.58$ Silica gel 60
(20/10/1)	
Identification by ¹ H NMR	Conforms to structure
Assay ¹ H NMR	99.8% (300 MHz; DMSO-d ₆)
Elemental analysis	Theory : C = 46.83%, H = 3.68%, N = 6.82% Found : C = 46.80%, H = 3.68%, N = 6.75%
Caution	Toxic !
Remarks	See Material Safety Data Sheets for additional information. For Laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

tumer.

Bala Kumar Quality Control Manager