Chem-Impex International, Inc.

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Certificate of Analysis

Catalogue Number	02406
Lot Number	000424-130710-35201
Product	Fmoc-L-glutamine Fmoc-L-glutamine
CAS Number	71989-20-3
Molecular Formula	$C_{20}H_{20}N_2O_5$
Molecular Weight	368.4
Appearance	White powder
Solubility	Clear solution (0.1 g in 20 mL DMF)
Melting Point	213.3-213.4 °C
Optical Rotation	$[a]_D^{20} = -17.8^{\circ} (C=1\% \text{ in DMF})$
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.33% (100 °C, 2 hr)
¹ H NMR	Conforms to structure
D-Enantiomer	Not detectable
Purity by HPLC	98.74%
Purity by TLC	>98%
Chiral Purity	100%
Storage	Store at 0-8 °C
Remarks	See material safety data sheet for additional information
	For laboratory use only

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

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Bala Kumar Quality Control Manager