Chem-Impex International, Inc.

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Certificate of Analysis

Catalogue Number	05692
Product	Fmoc-D-citrulline
Lot Number	000424-200610-21605
	Fmoc-D-Cit-OH
CAS Number	200344-33-8
Molecular Formula	$C_{21}H_{23}N_3O_5$
Molecular Weight	397.4
Appearance	White powder
Solubility	Clear solution (0.3 g in 2 mL DMF)
Melting Point	162.5 - 163.2 °C
Elemental Analysis (Found)	< 5% (C, H, N)
Water Content (Karl Fisher)	0.10%
Optical Rotation	$[a]_{D^{20}} = 9.4 \circ (C=2 \text{ in DMF})$
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.23% (70 °C, 2 h)
¹ H NMR	Conforms to structure
Chiral HPLC	99.89% (ee)
L-Enantiomer	0.1007%
Purity by HPLC	99.09%
Purity by TLC	> 98%
Storage	Store at 0 - 8 °C

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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