## **Chem-Impex International, Inc.**

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## Certificate of Analysis

Catalogue Number	02456
Product	Fmoc-b-(2-thienyl)-L-alanine
Lot Number	000424-211228-21030
	Fmoc-L-Ala-3-(2-thienyl)-OH
CAS Number	130309-35-2
Molecular Formula	$C_{22}H_{19}NO_4S$
Molecular Weight	393.4
Appearance	Off-white powder
Solubility	Clear solution (0.3 gram in 2 ml DMF)
Melting Point	171.2 - 173.0 °C
Elemental Analysis (Found)	< 5% (C, H, N)
Water Content (Karl Fisher)	0.14%
<b>Optical Rotation</b>	[a] <sub>D</sub> <sup>20</sup> = -33.4 ° (C=1, DMF)
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.12%
<sup>1</sup> H NMR	Conforms to structure
<b>D-Enantiomer</b>	0.08%
Purity by HPLC	99.27%
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