

# Chem-Impex International, Inc.

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## Certificate of Analysis

<b>Catalogue Number</b>	33603
<b>Lot Number</b>	000424-231001-20463
<b>Product</b>	<b>Fmoc-4-chloro-2-fluoro-L-phenylalanine</b> Fmoc-L-Phe(4-Cl,2-F)-OH (S)-Fmoc-2-amino-4-chloro-2-fluorophenylpropionic acid
<b>CAS Number</b>	1217811-90-9
<b>Molecular Formula</b>	C <sub>24</sub> H <sub>19</sub> ClFNO <sub>4</sub>
<b>Molecular Weight</b>	439.86

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<b>Appearance</b>	White solid
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = -40.4 ° (C=1 in DMF)
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Chiral HPLC</b>	100% (ee)
<b>D-Enantiomer</b>	Not detected
<b>Purity by HPLC</b>	99.7%
<b>Storage</b>	Store at 2 - 8 °C
<b>Remarks</b>	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



**Bala Kumar**  
Quality Control Manager