

# Chem-Impex International, Inc.

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## Certificate of Analysis

<b>Catalogue Number</b>	31897
<b>Lot Number</b>	000424-170711-23703
<b>Product</b>	<b>Fmoc-D-Aph(tBu-Cbm)-OH</b> (2R)-3-[4-(tert-butylcarbamoylamino)phenyl]-2-(9H-fluoren-9-ylmethoxycarbonylamino)propanoic acid
<b>CAS Number</b>	1433975-21-3
<b>Molecular Formula</b>	C <sub>29</sub> H <sub>31</sub> N <sub>3</sub> O <sub>5</sub>

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<b>Appearance</b>	Yellow powder
<b>Melting Point</b>	165.9-187.3 °C
<b>Water Content (Karl Fisher)</b>	1.19%
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b>Loss on Drying</b>	1.10% (80 °C, 2h)
<b>Related Substances</b>	Free amino acids (as H-D-Phe(4-NH <sub>2</sub> )-OH): 0.0% Fmoc-D-Phe(4-NH <sub>2</sub> )-OH: 0.0%
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>L-Enantiomer</b>	0.3163%
<b>Purity by HPLC</b>	98.43%
<b>Chiral Purity</b>	99.68% (ee)
<b>Storage</b>	Store at ≤ - 18 °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