

# Chem-Impex International, Inc.

---

**Tel:** (630) 766-2112

**E-mail:** sales@chemimpex.com

**Shipping and Correspondence:**

935 Dillon Drive

Wood Dale, IL 60191

**Fax:** (630) 766-2218

**Web site:** www.chemimpex.com

**Manufacturing site:**

825 Dillon Drive

Wood Dale, IL 60191

---

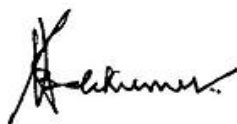
## Certificate of Analysis

<b>Catalogue Number</b>	31951
<b>Product</b>	<b>Fmoc-<math>\beta</math>-tert-butyl-D-alanine</b>
<b>Lot Number</b>	000424-170620-23102
	Fmoc- $\beta$ -tBu-D-Ala-OH
<b>CAS Number</b>	359766-58-8
<b>Molecular Formula</b>	C <sub>22</sub> H <sub>25</sub> NO <sub>4</sub>
<b>Molecular Weight</b>	367.44

---

<b>Appearance</b>	White to off-white powder/solid
<b>Optical Rotation</b>	[ $\alpha$ ] <sub>D</sub> <sup>20</sup> = 17.48 ° (C=1 in DMF)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b>Residual Solvents</b>	Not identified
<b>Related Substances</b>	Not identified
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Chiral HPLC</b>	100% (ee)
<b>L-Enantiomer</b>	Not detected
<b>Purity by HPLC</b>	99.9%
<b>Storage</b>	Store at 0 - 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**