## Chem-Impex International, Inc.

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## Certificate of Analysis

Catalogue Number 02458

**Lot Number** 000424-171129-36201

**Product** Fmoc-L-threonine

Fmoc-L-Thr-OH

CAS Number 73731-37-0 Molecular Formula C<sub>19</sub>H<sub>19</sub>NO<sub>5</sub>

**Molecular Weight** 341.4

**Appearance** White powder

**Solubility** Clear solution (0.3 g in 2 ml DMF)

**Melting Point** 92.6 - 98.3 °C

**Elemental Analysis** < 5% (C, H, N)

(Found)

Water Content (Karl 4.31%

Fisher)

**Optical Rotation**  $[a]_D^{20} = -15.6^{\circ} (C=1 \text{ in DMF})$ 

Infrared Spectrum Conforms to structure
Analysis by Mass Spectra Conforms to standard

**Loss on Drying** 0.12% (40°C, 2h)

<sup>1</sup>H NMR Conforms to structure

 Chiral HPLC
 99.98% (ee)

 D-Enantiomer
 0.0190%

 Purity by HPLC
 99.16%

 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

Bala Kumar

**Quality Control Manager**