## Chem-Impex International, Inc.

Tel: (630) 766-2112 Fax: (630) 766-2218

E-mail: sales@chemimpex.com Web site: www.chemimpex.com

**Manufacturing site:** 

Shipping and Correspondence:

935 Dillon Drive

Wood Dale, IL 60191

825 Dillon Drive

Wood Dale, IL 60191

## Certificate of Analysis

Catalogue Number 03639

Product Fmoc-L-glutamic acid α-allyl ester

**Lot Number** 000424-150317-36613

Fmoc-L-Glu-OAll

CAS Number 144120-54-7
Molecular Formula C<sub>23</sub>H<sub>23</sub>NO<sub>6</sub>
Molecular Weight 409.43

**Appearance** White to off-white powder

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

Melting Point 118.7-118.9 °C

**Water Content (Karl** 

Fisher)

0.195%

**Optical Rotation** [a]<sub>D</sub><sup>20</sup> = -21.8° (C=1 in DMF)

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

**Loss on Drying** 0.55% (50 °C, 2h) **1H NMR** Conforms to structure

Purity by HPLC 98.61%

**Application** Allyl esters are useful carboxy protecting groups in the synthesis of

various cyclic peptides glycopeptides. Allyl esters are cleaved quantitatively under mild conditions using Pd(0) catalyst.

**Storage** Store at 0-8 °C

## Certificate of Analysis

Catalog Number: 03639 Lot Number: 000424-150317-36613

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**