

# Chem-Impex International, Inc.

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## Certificate of Analysis

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| <b>Catalogue Number</b>   | 12774                                                                                |
| <b>Product</b>            | <b>Fmoc-L-β-homoglutamine</b>                                                        |
| <b>Lot Number</b>         | 002494-2016-04-20<br>Fmoc-L-β-HomoGln-OH<br>(S)-3-(Fmoc-amino)adipic acid 6-amide    |
| <b>CAS Number</b>         | 283160-17-8                                                                          |
| <b>Molecular Formula</b>  | C <sub>21</sub> H <sub>22</sub> N <sub>2</sub> O <sub>5</sub>                        |
| <b>Molecular Weight</b>   | 382.42                                                                               |
| <b>Appearance</b>         | White solid                                                                          |
| <b>Optical Rotation</b>   | [α] <sub>D</sub> <sup>25</sup> = +4 ± 1° (C=1 in DMF)                                |
| <b><sup>13</sup>C NMR</b> | Conforms to structure                                                                |
| <b><sup>1</sup>H NMR</b>  | Conforms to structure                                                                |
| <b>Purity by HPLC</b>     | 99.62%                                                                               |
| <b>Storage</b>            | Store at 0-8 °C                                                                      |
| <b>Remarks</b>            | See material safety data sheet for additional information<br>For laboratory use only |

The foregoing is a copy of the Certificate of Analysis as provided by our supplier



**Bala Kumar**  
**Quality Control Manager**