



# SPECIFICATION

| Tests                               | Specifications                                                                                    |
|-------------------------------------|---------------------------------------------------------------------------------------------------|
| Appearance                          | White powder                                                                                      |
| Clarity of solution                 | 5 mmol in 10ml DMF clear solution                                                                 |
| Identification (MS) (mu)            | Monoisotopic mass 619.7 ± 0.5                                                                     |
| Identification (UPLC)               | Coelutes with reference standard when the sample and standard solutions are coinjected (1:1, v/v) |
| Purity(UPLC) (%)                    | ≥99.0                                                                                             |
| Impurities (UPLC) (%)               | Fmoc-β-Ala-OH≤0.3                                                                                 |
|                                     | Fmoc-β-Ala-His(Trt)-OH≤0.3                                                                        |
|                                     | Fmoc-His(Trt)-His(Trt)-OH≤0.3                                                                     |
|                                     | Fmoc-His-OH≤0.3                                                                                   |
|                                     | each single unspecified≤0.5                                                                       |
| Impurity (TLC) (%)                  | H-His(Trt)-OH≤0.5                                                                                 |
| Specific Rotation $[\alpha]_D^{20}$ | +80.0° ± 5.0° (C = 1 in CHCl <sub>3</sub> )                                                       |
| Chiral Impurity (HPLC) (%)          | ≤ 0.2                                                                                             |
| Water Content (K.F.) (%)            | ≤ 1.0                                                                                             |
| Assay (Titration) (%)               | 90.0-105.0                                                                                        |
| Ethyl Acetate (%)                   | ≤1.0                                                                                              |
| Acetate (IC) (%)                    | ≤ 0.2                                                                                             |
| Identification (MS)                 | In accordance with the standard                                                                   |
| Identification (NMR)                | In accordance with the standard                                                                   |

Note: CS Bio reserves the right to revise the above information without any written consent to any users on any intent use of this information