## Chem-Impex International, Inc.

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## Certificate of Analysis

Catalogue Number 32695

**Lot Number** 000127-1022612

Product H-Arg-4MβNA hydrochloride salt

**CAS Number** 60285-94-1 (net), 61876-75-3

**Molecular Formula** C<sub>17</sub>H<sub>23</sub>N<sub>5</sub>O<sub>2</sub>•HCl

**Molecular Weight** 365.86

**Appearance** White powder

**Appearance of Solution** Clear, colorless solution in methanol (50 mg/mL)

**Elemental Analysis** 

(Found)

C = 55.8%

H=6.7% N=19.1%

Calc. as 1 HCl (9.6 Cl) x 0.1 H2O (0.5%)

Water Content (Karl

Fisher)

0.7%

TLC System n-butanol/acetic acid/H<sub>2</sub>O (4:2:2)

Chloroform/Methanol/Acetic acid 32% (5:3:1) Ethylacetate/Pyridine/Acetic acid/H<sub>2</sub>O (60:30:9:16.5)

Plate: Silicagel 60 F<sub>254</sub>

Detected by : UV, ninhydrin, TMB [a]<sub>D</sub><sup>24</sup> = 18.7 ° (C=0.5 in Methanol)

**Optical Rotation** [a]<sub>D</sub><sup>24</sup> = 18.7 ° (C=1) **Related Substances** < 0.1% 4MbNA

**Titration** Chloride content : 9.6% (AgNO3)

**Assay** 89.8% (Nfd 19.1% by elemental analysis)

**Purity by TLC** > 99%

**Storage** Store at 2 - 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**