

Certificate of Analysis

VcMMAE

Cat. No.: HY-15575 CAS No.: 646502-53-6 Batch No.: 316558

Chemical Name: L-Valinamide, N-[[[4-[[N-[6-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxohexyl]-L-valyl-N5-(amino

> carbonyl]-L-ornithyl]amino]phenyl]methoxy]carbonyl]-N-methyl-L-valyl-N-[(1S,2R)-4-[(2S)-2-[(1 R,2R)-3-[[(1R,2S)-2-hydroxy-1-methyl-2-phenylethyl]amino]-1-methoxy-2-methyl-3-oxopropyl]-

1-pyrrolidinyl]-2-methoxy-1-[(1S)-1-methylpropyl]-4-oxobutyl]-N-methyl-

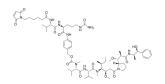
PHYSICAL AND CHEMICAL PROPERTIES

Molecular Formula: $\mathsf{C}_{68}\mathsf{H}_{105}\mathsf{N}_{11}\mathsf{O}_{15}$ Molecular Weight: 1316.63

-20°C, sealed storage, away from moisture and light Storage:

* The compound is unstable in solutions, freshly prepared is recommended.

Chemical Structure:



ANALYTICAL DATA	Specification	Result
Appearance:	White to off-white (Solid)	White (Solid)
¹ H NMR Spectrum:	Consistent with structure	Consistent with structure
LCMS:	Consistent with structure	Consistent with structure
MeOH:	≤ 3000 ppm	N.D
EtOH:	≤ 3000 ppm	N.D
ACN:	≤ 410 ppm	N.D
DCM:	≤ 600 ppm	N.D
MTBE:	≤ 5000 ppm	N.D
n-hexane:	≤ 290 ppm	N.D
EA:	≤ 720 ppm	N.D
Dioxane:	≤ 380 ppm	N.D
Pyridine:	≤ 200 ppm	N.D
DMF:	≤ 880 ppm	N.D
DIPEA:	≤ 1000 ppm	N.D
DMAC:	≤ 1090 ppm	N.D

Water(KF): 1.59%

PH: 5.5

Purity(HPLC): 99.94%

Assay: 98.35%

Conclusion: The product has been tested and complies with the given specifications.

Caution: Product has not been fully validated for medical applications. For research use only.

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