



Certificate of Analysis

Semax Acetate

Product Name : Semax Acetate
Mfg. Date : Feb 14, 2025
M.F. : C₃₉H₅₅N₉O₁₂S
CAS No. : 80714-61-0 (Free Base)
Sequence : Met-Glu-His-Phe-Pro-Gly-Pro-CH₃COOH

Lot No. : DL8785
Exp. Date : Feb 13, 2028
M.W. : 873.98
Batch Qty : 453 g

TESTS	SPECIFICATIONS		RESULTS
Appearance	White crystalline powder		White crystalline powder
Solubility	Soluble in water		Conforms
Amino Acid Composition (AAA)	Glu	0.9 - 1.1	1.0
	Gly	0.9 - 1.1	1.0
	His	0.9 - 1.1	1.0
	Met	0.9 - 1.1	1.1
	Phe	0.9 - 1.1	1.0
	Pro	1.8 - 2.2	2.0
Mass (MS)	813.92 ± 1		813.43
Water Content (KF)	≤ 10.0%		4.80%
Acetic Acid Content (HPLC)	≤ 15.0%		2.50%
Peptide Purity (HPLC)	≥ 98.0%		99.2%
Peptide Content (N%)	≥ 85.0%		92.0%
Related Substance (HPLC)	Total Impurities	≤ 2.00%	0.80%
	Largest Single Impurity	≤ 1.00%	0.30%
Residual Solvent (GC)	Formaldehyde	Negative	Not Detected
	Pyridine	≤ 200 ppm	< 200 ppm
	Acetonitrile	≤ 410 ppm	< 410 ppm
	Dichloromethane	≤ 600 ppm	< 600 ppm
	N,N-Dimethylformamide	≤ 880 ppm	< 880 ppm
	Triisopropylsilane	≤ 1000 ppm	< 1000 ppm
	Ethyl Ether	≤ 5000 ppm	< 5000 ppm
Bacterial Endotoxins (USP2022)	≤ 10.0 EU/mg		< 10 EU/mg
Microbial Limits (USP2022)	Total Aerobic Microbial Count	≤ 10 ² CFU/g	< 20 CFU/g
	Total Yeast and Mold Count	≤ 10 ² CFU/g	< 20 CFU/g
	<i>E. coli</i>	Negative	Conforms
Assay (On Anhydrous and Acetic Acid-Free Basis) (HPLC) (CP2020)	95.0 - 105.0%		99.5%
Conclusion: The product is a synthetic peptide and meets the In-House specifications. FOR R&D USE ONLY. Long Term Storage: Store in a sealed container at 2 - 8°C in the fridge or in the freezer. Distributed by Darmerica.			

Based on the review of above information, the lot stands released.

	Name	Title	Signature	Date
Prepared by	Christina Boykin	Quality Supervisor		04/28/2025
Released by	Luz Guevara	Quality Assistant		04/29/2025