

## CERTIFICATION OF ANALYSIS

KPV Powder (Synthetic)	CAS: 67727-97-3
Product No.:800133	Batch No.: 24040104
Date of Mfg:May 14, 2024	Date of Exp: May 13, 2026
Sequence:Lys-Pro-Val	

Test	Specification	Result
Appearance	White or off-white powder	conforms
Solubility	Soluble in water and 1% acetate acid	conforms
HPLC	The principal peak in the chromatogram obtained with the test solution is similar in retention time to principal peak in the chromatogram obtained with the reference solution.	conforms
Amino acid analysis	Lys            0.9-1.1 Val            0.9-1.1 Pro            0.9-1.1 No more than the traces of the other amino acids are present.	Lys            1.0 Val            1.0 Pro            1.0 No more than the traces of the other amino acids are present.
MS	342.4 ± 1.0	342.2
Related Substances	Unspecified impurity for each impurity: NMT1.0%	0.9%
Purity(HPLC)	NLT 98%	98.8%
Acetic acid	NMT 30.0%	15.2%
Water Content(Karl Fischer)	NMT 7.0%	5.7%
Assay	95.0%-105.0% (anhydrous and acetic acid free substance)	98.2%
Bacterial endotoxins	Less than 5IU/mg	conforms
Residual solvent		
Dichloromethane	NMT 600 ppm	N.D
Acetonitrile	NMT 410 ppm	179 ppm
N,N-Dimethylformamide	NMT 880 ppm	N.D

CERTIFICATION OF ANALYSIS	
KPV Powder (Synthetic)	CAS: 67727-97-3
Product No.:800133	Batch No.: 24040104
Date of Mfg:May 14, 2024	Date of Exp: May 13, 2026
Sequence:Lys-Pro-Val	

**Storage: In an air tight container, protected from light**

**Temperature :Short Term:2-8℃ ; Long Term:below-10℃**

Conclusion: the product complies with specification.

It is only supplied as chemical product.

Analysis :Janie.zhang

Approved by : Christ.zheng

Date :2024.05.23

Date :2024.05.23