



CERTIFICATE OF ANALYSIS

Product Name	HAP01-200nm(D50)		
Batch Number	BH250422CH	Analysis Date	2025-04-27
Manufacture Date	2025-04-22	Expiry Date	2027-04-21

Items	Standards	Results	Method
Physical and chemical analysis:			
Description	White powder, without any visible impurities or blemishes	Qualified	Visual& Optical Microscope
Shape	Needle-like / Rod-like	Qualified	Visual& Optical Microscope
Mesh Size	Average particle size: 200 nm, with no deviation of more than 50 nm either upward or downward	Qualified	GB/T23101.6-4.6
Assay(HAP)	Purity≥96%	97%	GB/T23101.3-7、8
Burn-off weight loss	<5%	1.1%	GB/T1875
Total volatile matter at 105℃	≤3%	0.7%	Pharmacopoeia 2020 Edition - Loss on Drying
Calcium to phosphorus ratio	1.66-1.71	1.667	GB/T 23101.1-4.1
IR absorption spectrum	There should be an OH absorption peak at 3573 cm-1 and 632 cm-1, a P04-3 absorption peak at 1090 cm-1, 1047 cm-1, 959 cm-1, 601 cm-1 and 571 cm-1. No absorption peaks for carbonate ions, carbonyl groups, amines or other impurities are observed.	Qualified	GB/T 23101.6 - Appendix A.3
Residue analysis:			
Heavy Metal	≤30ppm	10ppm	GB/T23101.1-4.2
Pb	≤5ppm	0.136ppm	GB/T23101.1-4.2
As	≤3ppm	0.117ppm	GB/T23101.1-4.2
Hg	≤5ppm	0.201ppm	GB/T23101.1-4.2
Cd	≤5ppm	0.009ppm	GB/T23101.1-4.2
General Information:			
Conclusion	Conform to GB23101.6-2022 specification.		
Storage	Keep in cool & dry place. Keep away from strong light and heat.		
Shelf life	24 months under the conditions above and in its original packaging.		

Tested by: Tony Liu

Approved by: Mike He

Certified by: Albert Li

