## **Certificate of Analysis**



## Product Identification Chemical Structure

Catalog numberHB0021Compound nameR-CPP

Chemical name (R)-3-(2-Carboxypiperazin-4-yl)propyl-1-phosphonic acid

 $\begin{array}{lll} \textbf{Batch number} & \text{E1509-4-13} \\ \textbf{Batch molecular formula} & \text{C}_8\text{H}_{17}\text{N}_2\text{O}_6\text{P.H}_2\text{O} \\ \textbf{Batch molecular weight} & 270.22 \end{array}$ 

N OH	
N H CO <sub>2</sub> H	

Method	QC requirement	QC Result
NMR	1H NMR in $\mathrm{D}_2\mathrm{O}$ at 400 MHz consistent with structure	Meets specification
Mass spectrum	Electrospray negative analysis consistent with structure	Meets specification
Microanalysis	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
TLC	TLC analysis in 50% PAW:BuOH shows one spot under ninhydrin	Meets specification: R <sub>f</sub> =0.1
Physical appearance	White to off-white solid	Meets specification: White solid
Solubility	Soluble in water (100 mM)	Meets specification

Produced by Signature

Passed by Signature

Date 14-05-21

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.