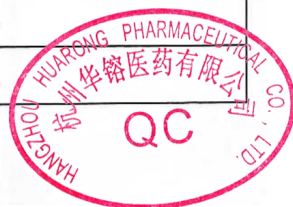


## CERTIFICATE OF ANALYSIS

Product name:	Carfilzomib	Batch No.:	DA333-201202
Batch size:	1.145kg	Ref. standard:	In-house standard
Manu. date:	Dec.11,2020	Retest date:	Dec.10,2022
<b>ITEM</b>	<b>SPECIFICATION</b>	<b>RESULT</b>	
Appearance	White or off-white powder	White powder	
Identification	A: HPLC(obtained in assay by HPLC)	Conform	
	B: IR	Conform	
	C: PXRD: Amorphous(No characteristic peaks.)	Conform	
Solution clarity and color	The sample solution should be clear colorless;If turbidity appears,it shall not be thicker than No.1 standard solution;If the color is developed,it shall not be darker than the yellow No.2 standard color solution.	Conform	
Related substances	Impurity-C $\leq$ 0.15%	0.025%	
	Impurity-D $\leq$ 0.15%	N.D.	
	Impurity-E $\leq$ 0.15%	0.049%	
	Impurity-G $\leq$ 0.15%	N.D.	
	Impurity-H $\leq$ 0.15%	0.028%	
	Impurity-J $\leq$ 0.15%	0.061%	
	Other single impurity $\leq$ 0.10%	0.026%	
	Total impurities $\leq$ 1.0%	0.24%	
Residual solvents	Methanol $\leq$ 0.3%	0.005%	
	Dichloromethane $\leq$ 0.06%	N.D.	
	Methyl tert-butyl ether $\leq$ 0.5%	N.D.	
	Ethyl acetate $\leq$ 0.5%	N.D.	
	Tetrahydrofuran $\leq$ 0.072%	N.D.	
	N-heptane $\leq$ 0.5%	N.D.	
	N,N-Diisopropylethylamine $\leq$ 0.045%	N.D.	
Residual solvents	N-methylpyrrolidone(NMP) $\leq$ 0.053%	N.D.	
	Acetone $\leq$ 0.5%	N.D.	



**CERTIFICATE OF ANALYSIS**

Product name:	Carfilzomib	Batch No.:	DA333-201202
Batch size:	1.145kg	Ref. standard:	In-house standard
Manu. date:	Dec.11,2020	Retest date:	Dec.10,2022
<b>ITEM</b>	<b>SPECIFICATION</b>	<b>RESULT</b>	
	Malonic acid $\leq$ 0.15%	N.D.	
Assay	98.0%~102.0%(on the anhydrous basis )	100.6%	
Water	$\leq$ 2.0%	0.73%	
Residue on ignition	$\leq$ 0.1%	0.02%	
Heavy metal	$\leq$ 10ppm	< 10ppm	
Bacterial endotoxins	< 100EU/g	Conform	
Microbiological purity	Total number of aerobic bacteria $\leq$ 10 <sup>2</sup> cfu/g	< 20cfu/g	
	Total number of mould and yeast $\leq$ 10 <sup>2</sup> cfu/g	< 20cfu/g	
	Escherichia coli: not detected	Conform	
<b>CONCLUSION: THIS BATCH COMPLIES WITH IN-HOUSE STANDARD.</b>			
<b>Remark:</b> N.D.= not detected			

