

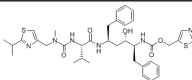


杭州泽尔瑞化学有限公司

HANGZHOU ZEERRUI CHEMICAL CO., LTD

Certificate of analysis

COA No:ZER11912021

Product Name	Ritonavir
CAS No	155213-67-5
Molecular Formula	
Molecular Weight	C37H48N6O5S2
Manufacturing date	20191008
Batch No	20191008

Index Name	Specification	Result
Appearance	White to off- white powder	Conforms
Identification by IR	The infrared absorption spectrum of sample conforms with reference standard	Conforms
Identification by HPLC	The retention time of the major peak of the Sample solution is within 2% of the retention time of the major peak of the standard solution,as obtained in the Assay	Conforms
Water content(by KF)	Not more than 0.50%	0.09%
Residue on ignition	Not more than 0.20%	0.05%
Heavy Metals	Not more than 0.002%	Conforms
Related Substance	Impurity E(RRT=0.36):Not more than 0.30%	ND
	Impurity O(RRT=1.11):Not more than 0.30%	ND
	Impurity T(RRT=2.87):Not more than 0.20%	ND
	Any other individual impurity : Not more than 0.10%	0.09%
	Total impurities: Not more than 1.0%	0.24%
Residue Solvents	MTBE:Not more than 5000ppm	ND
	Methanol:Not more than 5000ppm	ND
	Toluene:Not more than 890ppm	ND
	Tetrahy drofuran:Not more than 720ppm	ND
	Ethyl acetate:Not more than 5000ppm	961ppm
	Heptanc:Not more than 5000ppm	252ppm
	2-propanol:Not more than 5000ppm	ND
	Ethanol:Not more than 5000ppm	ND
Assay by HPLC(On dry basis)	98.0% ~ 102.0%	99.2%
Conclusion	Conforms to the standard of USP 38	

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CHECK:

叶明立

INSPECTION:

