



Certificate of analysis

Productname: **Ritonavir**

Cas number: 155213-67-5

Molecular Formula: C₃₇H₄₈N₆O₅S₂

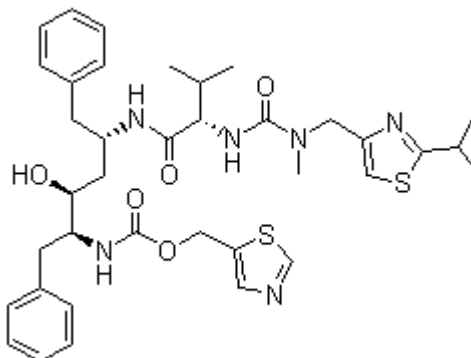
Molecular Weight: 720.94

Date of production: Aug. 25, 2018

Batch No: 20180825

Exp Date: Aug. 24, 2020

Chemical structure:



Items	Specifications	Results
Appearance	A white or off white powder	white powder
Identification	IR,HPLC	Conforms
Heavy metals	≤20ppm	Conforms
Water	≤0.5%	0.06%
Residue on ignition	≤0.2%	0.04%
Residual solvents		
MTBE	≤500PPM	ND
Methanol	≤500PPM	160ppm
Toluene	≤300PPM	80ppm
Ethyl acetate	≤1000PPM	460ppm
Heptane	≤500PPM	340ppm
Tetrahydrofuran	≤300PPM	130ppm
2-propanol	≤500PPM	120ppm
Ethanol	≤1000PPM	580ppm
Organic Impurities(by HPLC)		
Impurity E(RRT=0.36)	≤0.3%	ND
Impurity O(RRT=1.11)	≤0.3%	ND
Impurity T(RRT=2.87)	≤0.2%	ND
Any other impurity	≤0.1%	0.096%
Total Impurities	≤1.0%	0.27%
Assay by HPLC	97.0%-102.0%(on the anhydrous basis)	98.44%

Conclusion: It complies with the USP35 Standard.

Analyst: Zhao

Checker: Liu

Q.C Director. Fang F