



Certificate of analysis

Product name: Rapamycin/Sirolimus

Cas number: 53123-88-9

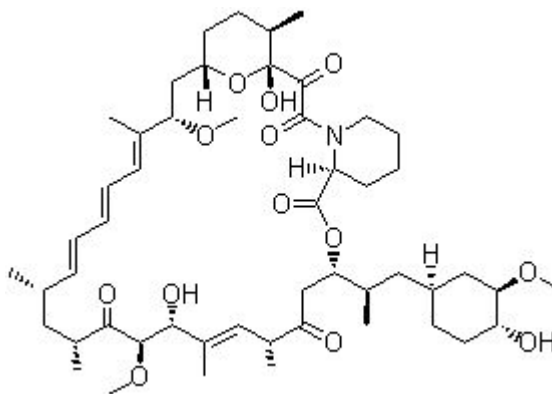
Molecular Formula: C₅₁H₇₉NO₁₃

Molecular Weight: 914.18

Date of production: Aug. 08, 2014

Batch NO: 20140808

Exp Date: Aug. 07, 2016



Chemical structure:

Items	Specifications	Results
Appearance	Odorless, off-white to yellow crystalline powder	Conform
Identification A	The IR spectrum of Potassium Bromide preparation of the sample exhibits maxima at the same wavelengths as that of a similar preparation of in-house reference standard.	Conform
Identification B	The UV spectrum of 95% Ethanol preparation of the sample exhibits maxima at 267nm, 277nm, 288nm that of a similar preparation of in-house reference standard.	Conform
Identification C	The retention times of the peaks for the Trans- and Cis-stereoisomers in the chromatogram of Assay preparation corresponds to that in the chromatogram of the standard preparation, as obtained in the Assay	Conform
Loss On Dry	Not More Than 0.5%	0.18%
Heavy Metals	Not More Than 0.002%	Conform
Chromatographic Purity		
Individual Impurity	Not More Than 1.0%	0.3%
Total Impurities	Not More Than 2.0%	1.0%
Cis-stereoisomer of Sirolimus	Not More Than 5.0%	2.5%
Assay	98.0% to 102.0% calculated trans- and Cis-stereoisomer of Sirolimus on the dried basis	99.0%
Ethanol	«5000ppm	Not Detected
Ethyl Acetate	«5000ppm	72ppm
Petroleum Ether	«1000ppm	Not Detected
Acetone	«5000ppm	Not Detected

Conclusion: It complies with the Enterprise Standard.

Analyst: Zhao

Checker: Liu

Q.C Director: Fang F