

# Chem-Impex International, Inc.

---

Tel: (630) 766-2112

E-mail: sales@chemimpex.com

Shipping and Correspondence:

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218

Web site: www.chemimpex.com

Manufacturing site:

825 Dillon Drive

Wood Dale, IL 60191

---

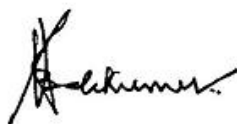
## Certificate of Analysis

<b>Catalogue Number</b>	31031
<b>Lot Number</b>	001926-006-20200113
<b>Product</b>	<b>Rapamycin from Streptomyces hygroscopicus</b> 23,27-Epoxy-3H-pyrido[2,1-c][1,4]oxaazacyclohentriacontine
<b>CAS Number</b>	53123-88-9
<b>Molecular Formula</b>	C <sub>51</sub> H <sub>79</sub> NO <sub>13</sub>
<b>Molecular Weight</b>	914.17

---

<b>Appearance</b>	Off-white crystalline powder
<b>Water Content (Karl Fisher)</b>	0.12%
<b>Infrared Spectrum</b>	Conforms to structure
<b>Residual Solvents</b>	Ethanol : < 0.5% Diethyl ether : < 0.5% Ethyl acetate : < 0.5% Dichloromethane : < 0.06% n-Hexane : < 0.029%
<b>Related Substances</b>	Impurity A : Not detected C Isomer : 1.5% Max. single unknown impurity : 0.21% Total impurities : 0.59%
<b>Purity by HPLC</b>	99.5%
<b>Storage</b>	Store at - 10 °C
<b>Remarks</b>	See material safety data sheet for additional information For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier



**Bala Kumar**  
Quality Control Manager