

Identification, Characterization, Synthesis and Strategy for Minimization of Potential Impurities Observed in the Synthesis of Solithromycin

Zhihong Zhong^{||, †}, Chong Du^{||, †}, Zhonghua Luo[†], Shuaihua Song[†], Gaohong Liao[†], Jia Yao[†], Siegfried Goldmann[†], Zhongqing Wang^{*, †, §}

[†]HEC Research and Development Center, HEC Pharm Group, Dongguan 523871, P. R. China

[§] State Key Laboratory of Anti-Infective Drug Development, Sunshine Lake Pharma Co., Ltd, Dongguan 523871, P. R. China

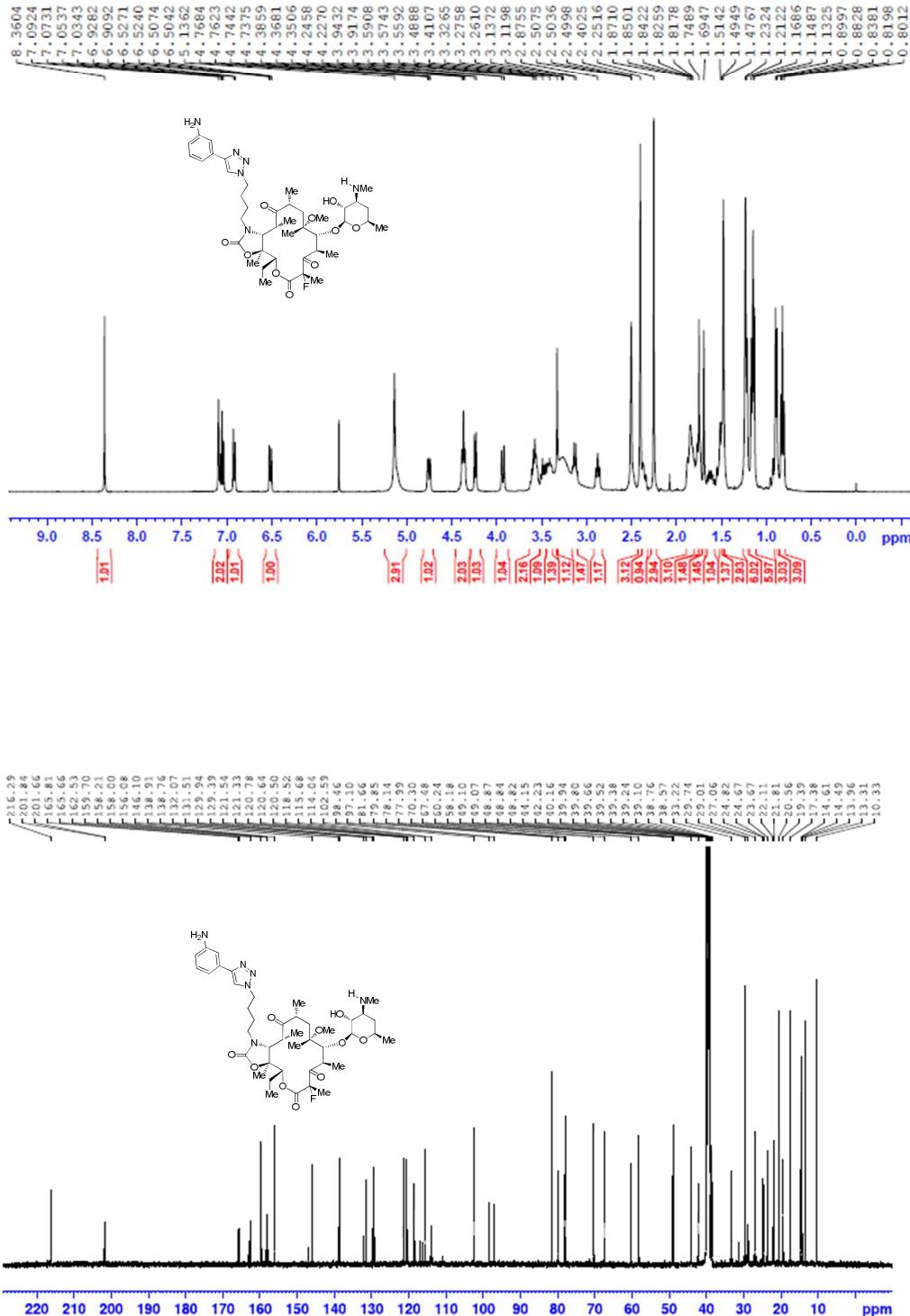
Supporting Information

Table of contents

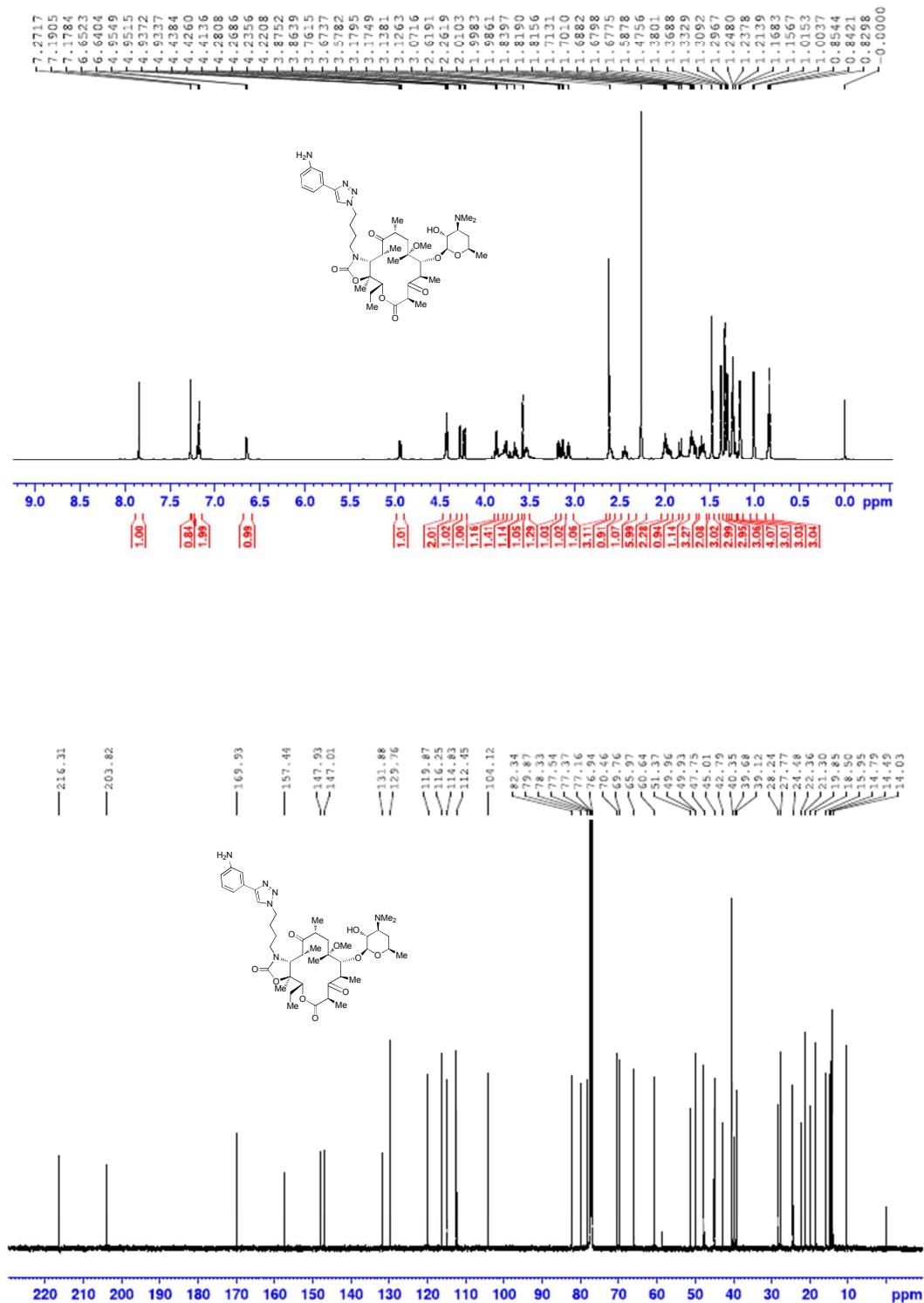
1. ¹ HNMR and ¹³ CNMR spectra -----	S2
2. The Absolute Configuration of solithromycin (1) -----	S9

1. ^1H NMR and ^{13}C NMR spectra.

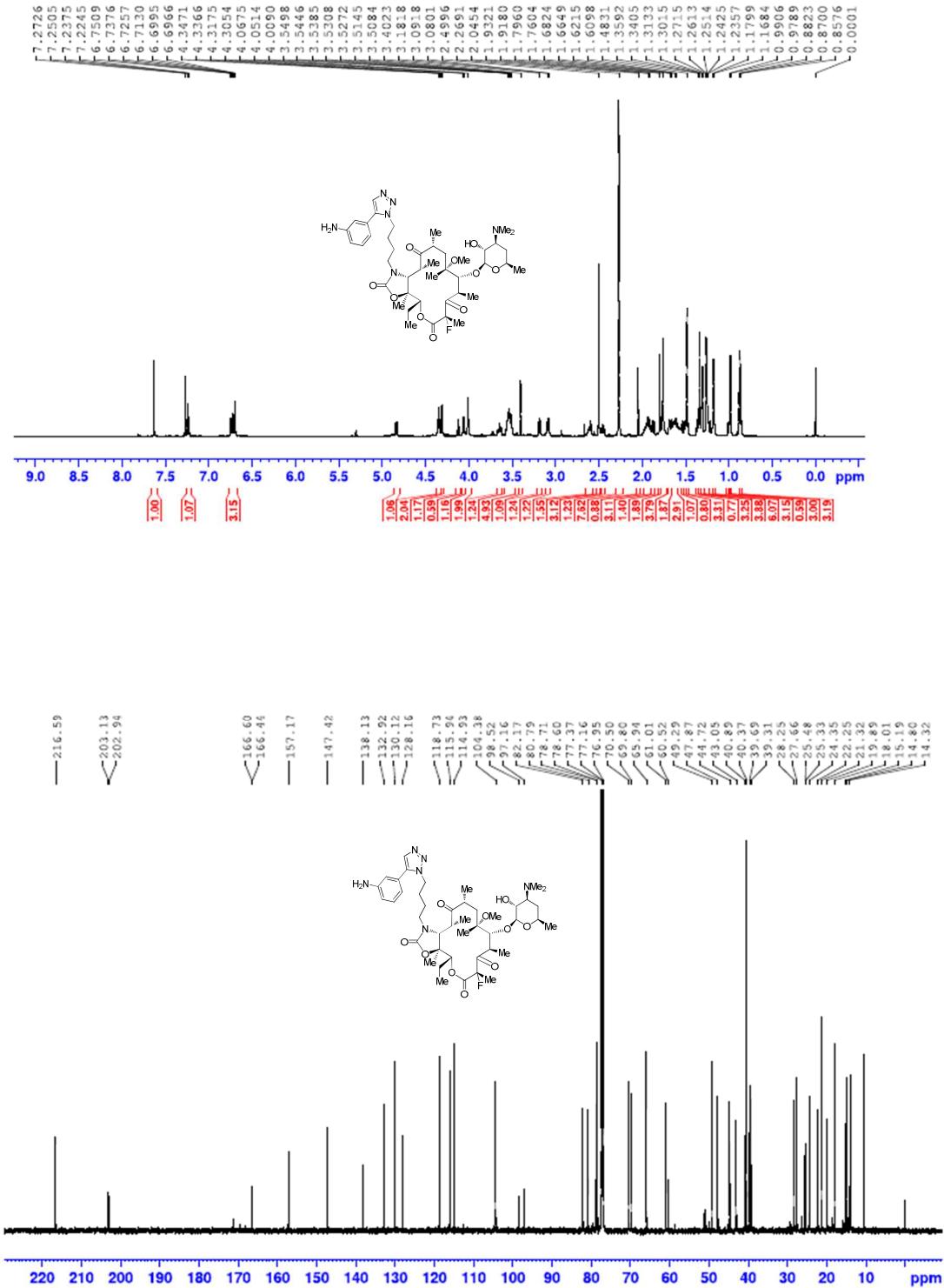
Impurity A



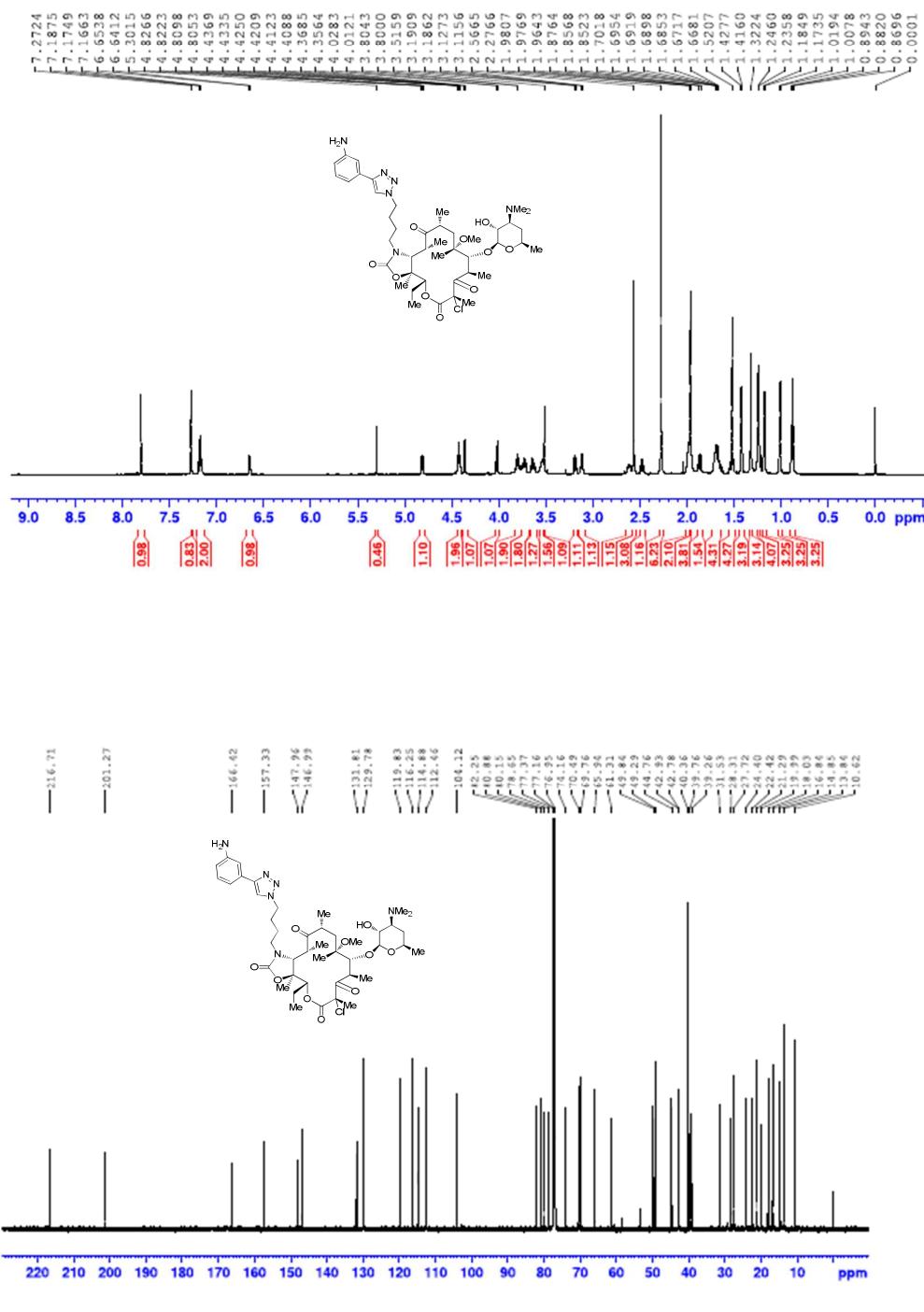
Impurity B



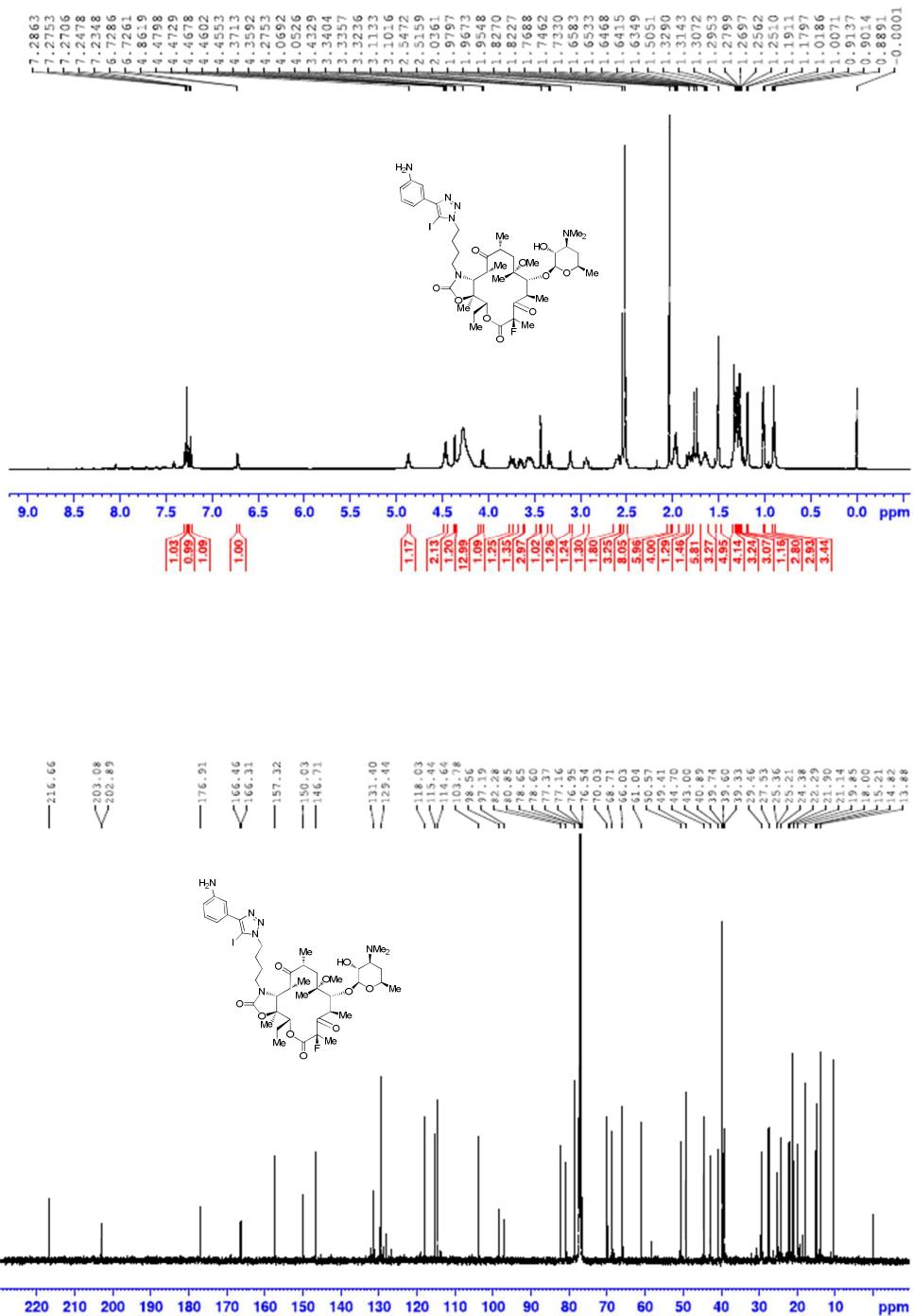
Impurity C



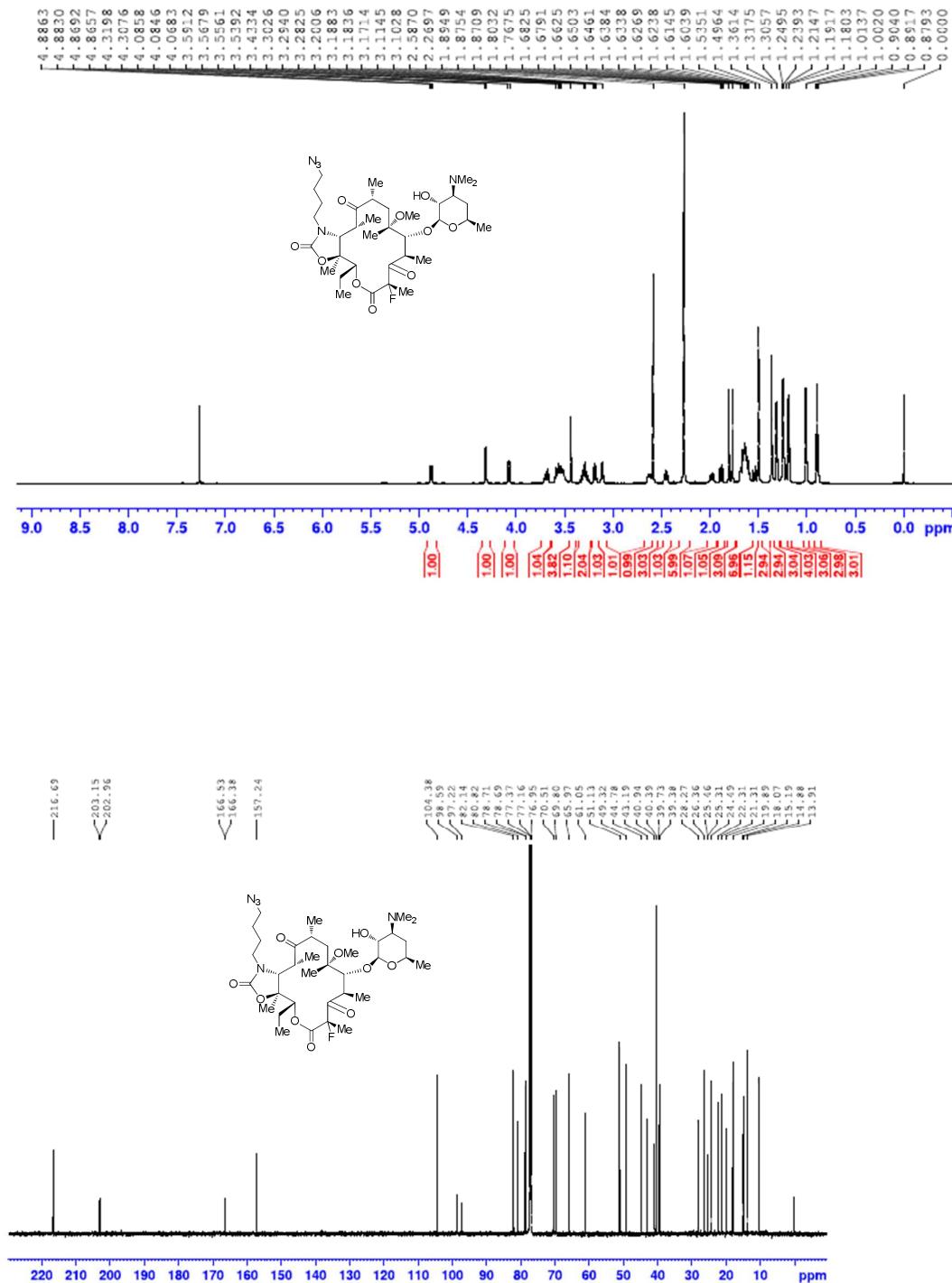
Impurity D



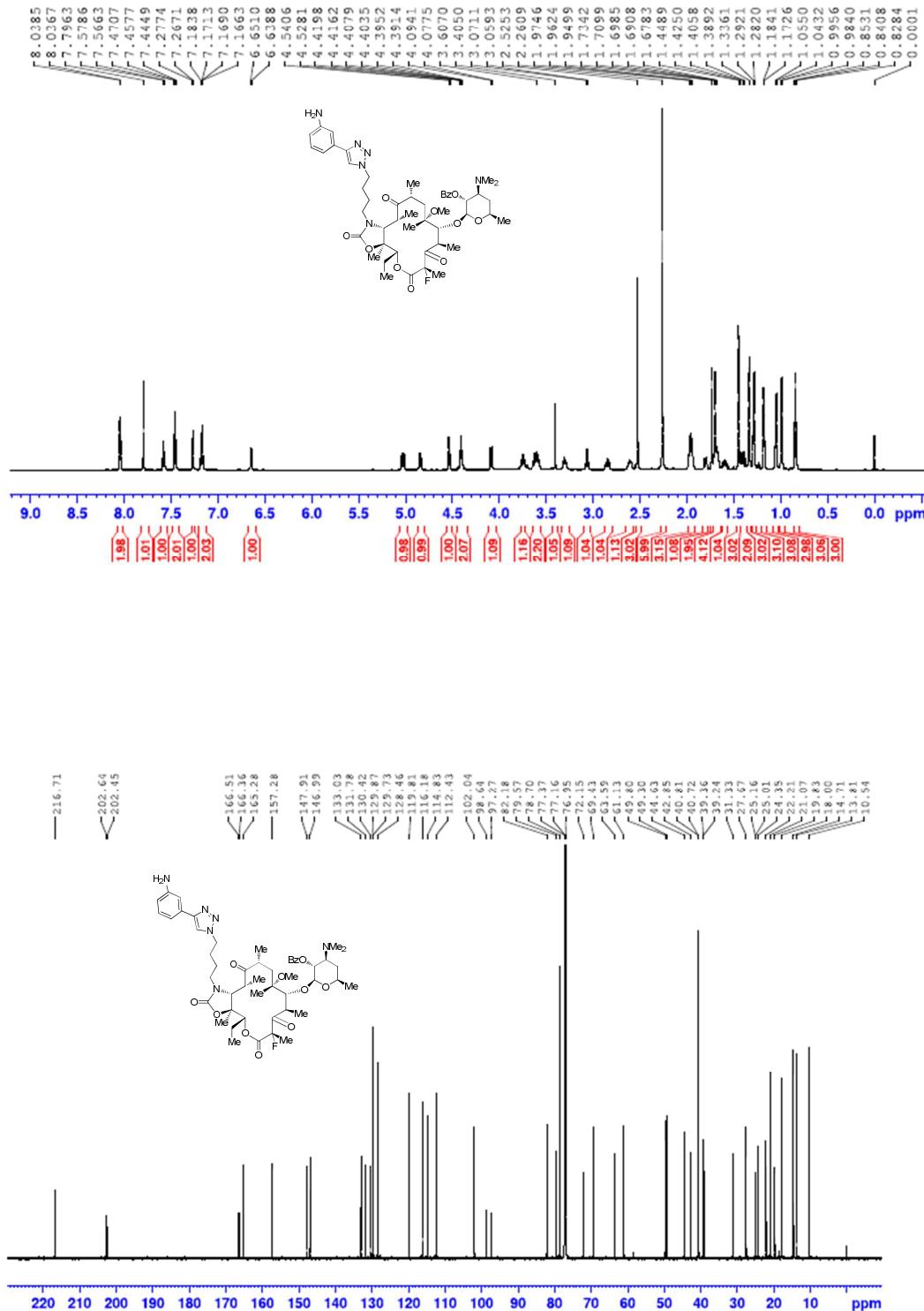
Impurity E



Impurity F



Impurity G



2. The Absolute Configuration of solithromycin (1).

X-ray Single Crystal Structure Analysis of solithromycin (1).

X-ray crystallographic data of solithromycin were solutions at T = 150(2) K: C₄₃H₆₅FN₆O₁₀, Mr = 845.01, block. Space group $P2_12_12_1$, $a = 8.60670(10)$ Å, $b = 19.0255(2)$ Å, $c = 28.0976(2)$ Å, $\alpha = 90^\circ$, $\beta = 90^\circ$, $\gamma = 90^\circ$, $V = 4600.89(8)$ Å³, $Z = 4$.

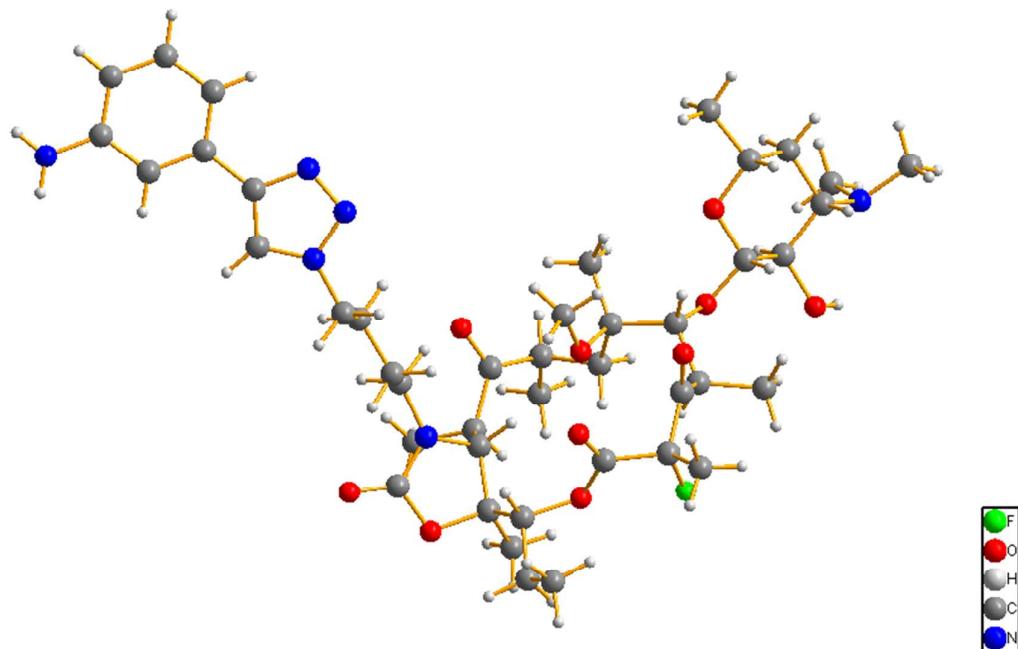


FIGURE S1. The crystal structure of 1 by X-ray analysis.

These data (CCDC **1554396**) can be obtained free of charge from the Cambridge Crystallographic Data Centre via www.ccdc.cam.ac.uk/data_request/cif.