Supplemental data

In vitro antitubercular activity of extract and constituents from the stem bark of *Disthemonanthus benthamianus* Baill. (Ceasalpinaceae)

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Abstract

A new *C*-glycosylflavone, apigenin 7-methyl ether 6-*C*-[β-xylopyranosyl-(1→3)-β-glucopyranoside] named distemonanthoside (**1**) was isolated from the stem bark of *Distemonanthus benthamianus*, along with six known compounds, sitosterol 3-*O*-β-D-glucopyranoside (**2**), 4-methoxygallic acid (**3**), syringic acid (**4**), quercetin (**5**), 6″-*O*-acetylvitexin (**6**), quercetin 3-*O*-β-D-glucopyranoside (**7**). The structures of those compounds and others were determined through spectral analyses. Compounds **1, 2, 3** and **5** were tested against a clinical isolate strain of *Mycobacterium tuberculosis* AC 45; they exhibited good to moderate antitubercular activities with MIC values ranged from 31.25 to 125 µg/ml.

Keywords: Ceasalpinaceae; *Distemonanthus benthamianus*; flavonoids; distemonanthoside; antitubercular activity; phenolic acid

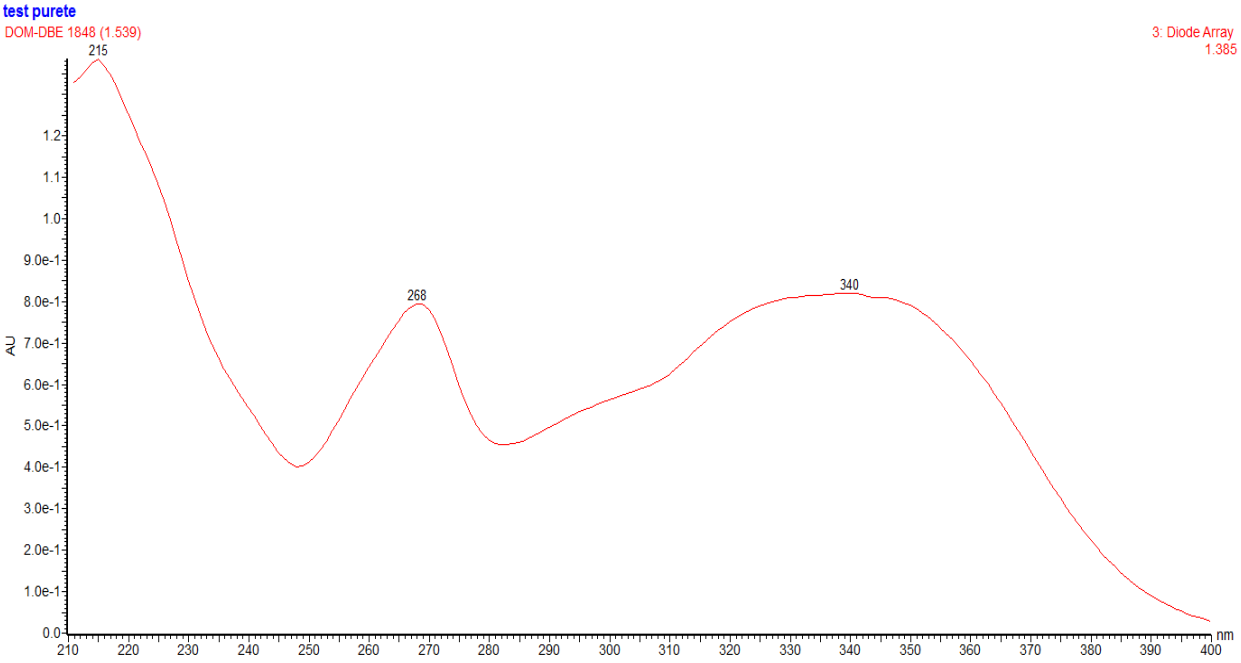

Fig.S1. UV spectrum of compound **1**

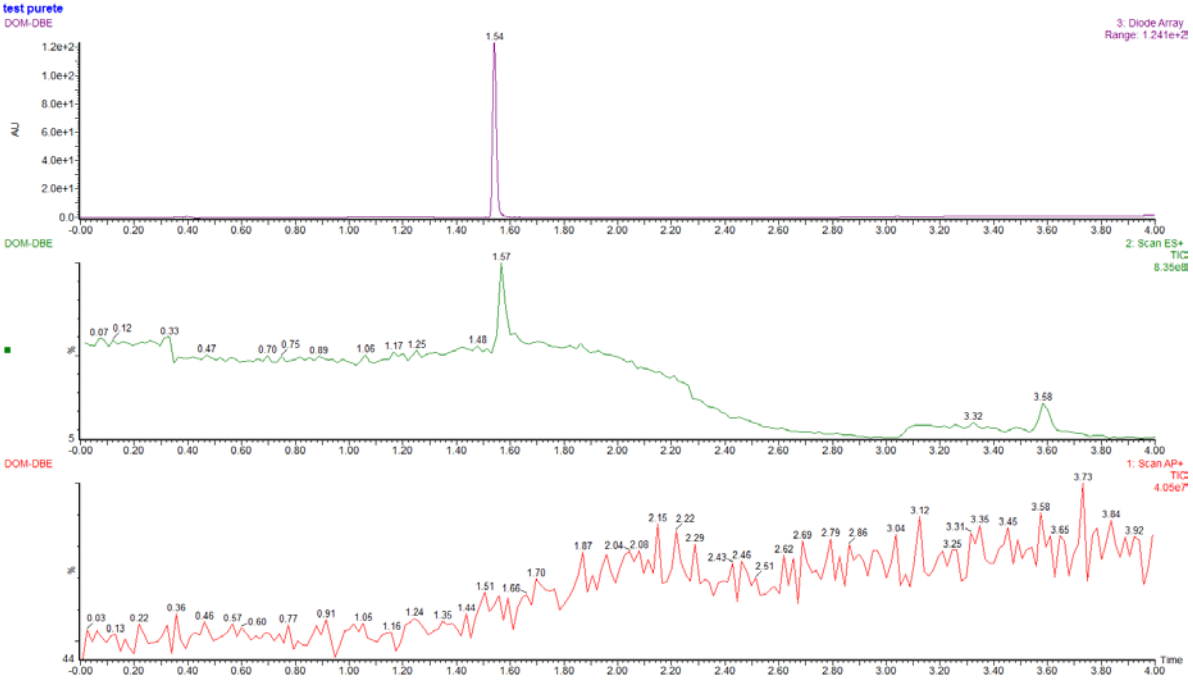

Fig.S2. UPLC chromatogram of compound **1**

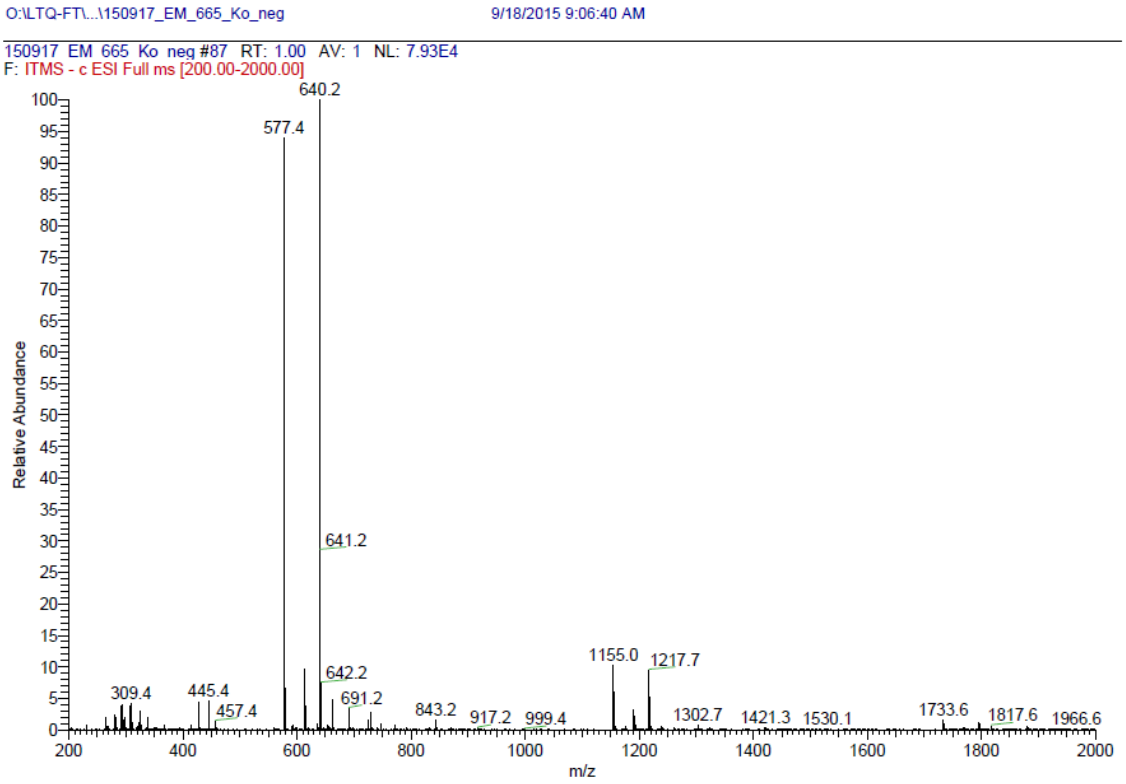

Fig. S3 ESI-MS spectra of compound **1 (Negative mode)**

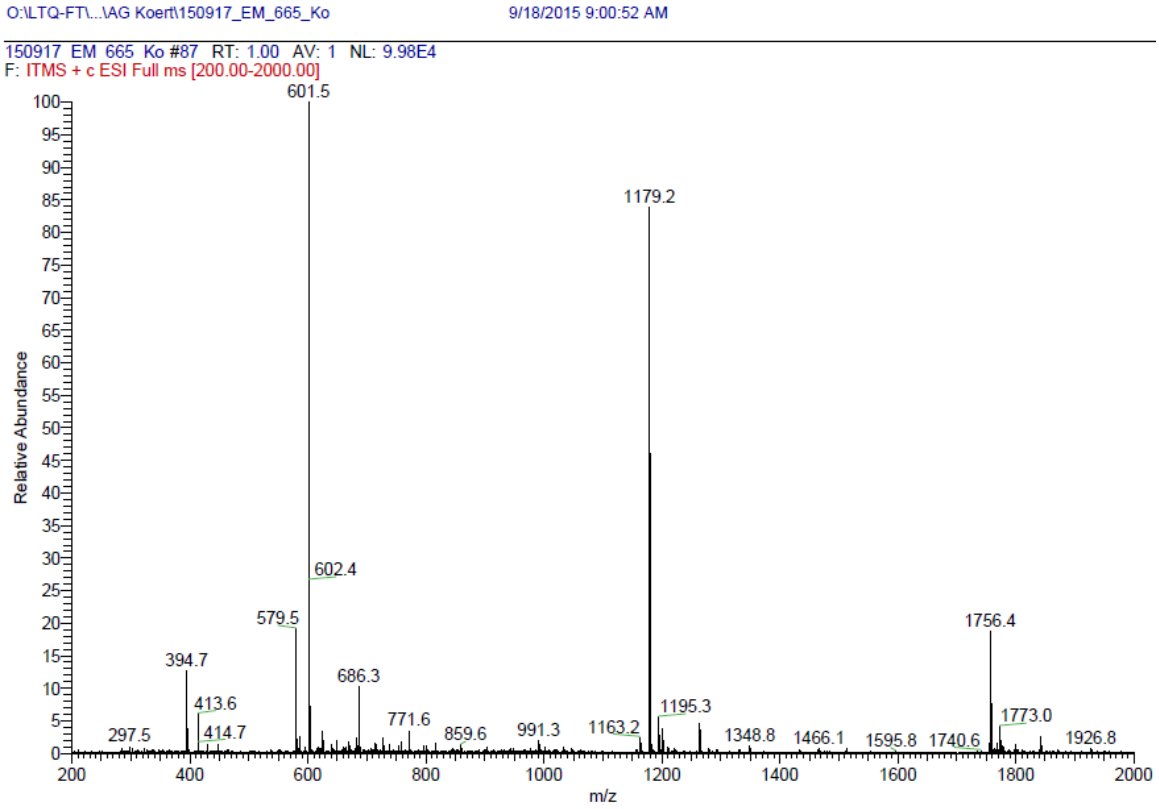

Fig. S4 ESI-MS spectra of compound **1 (Positive mode)**

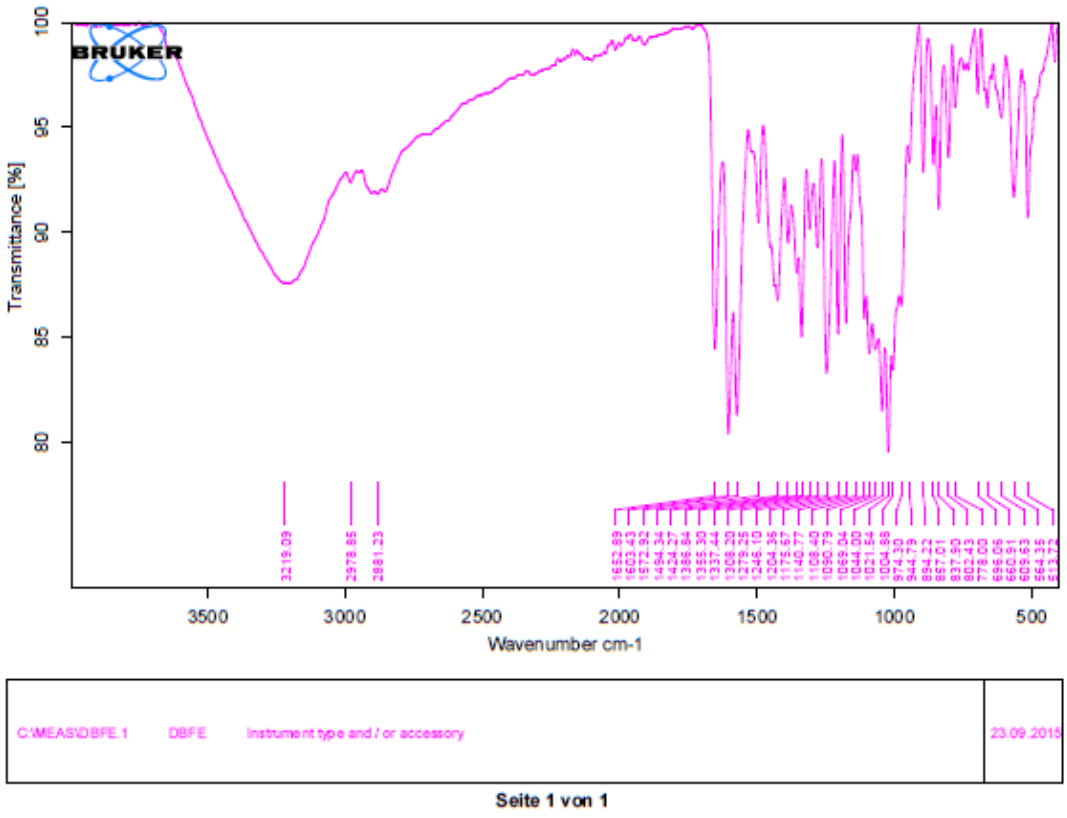

Fig. S5 IR spectrum of compound **1**

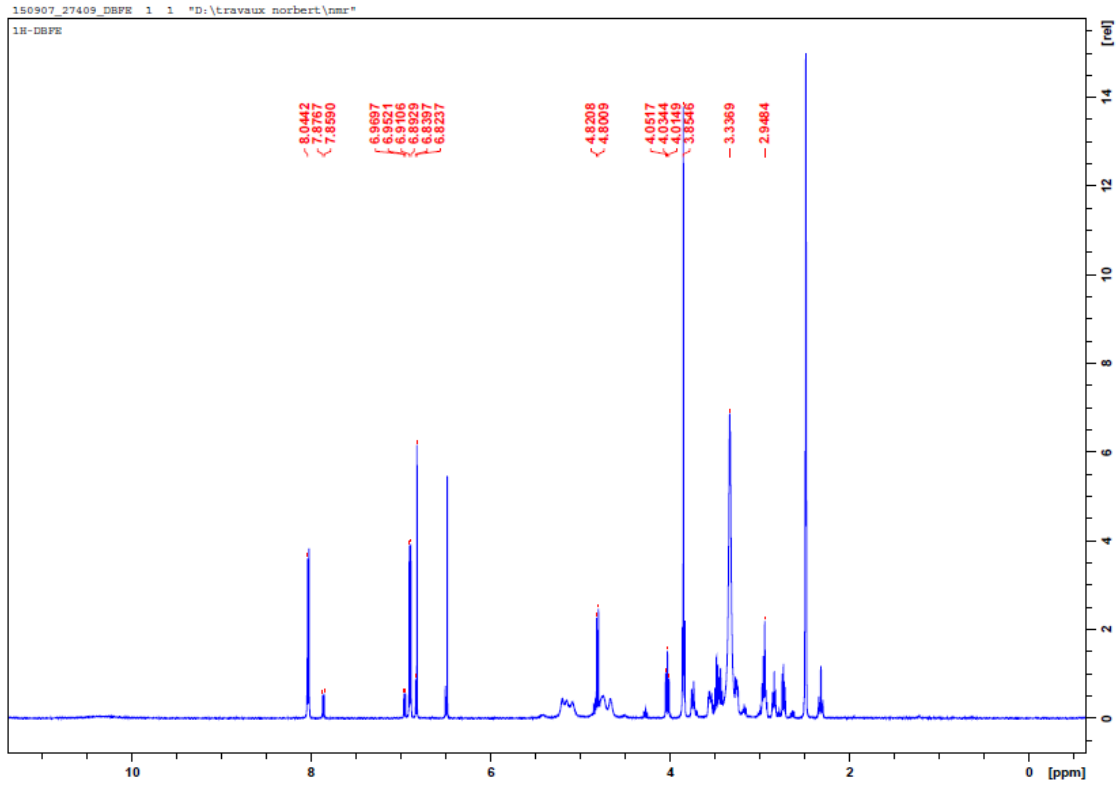

Fig. S6 ^{1}H NMR spectrum of compound **1**

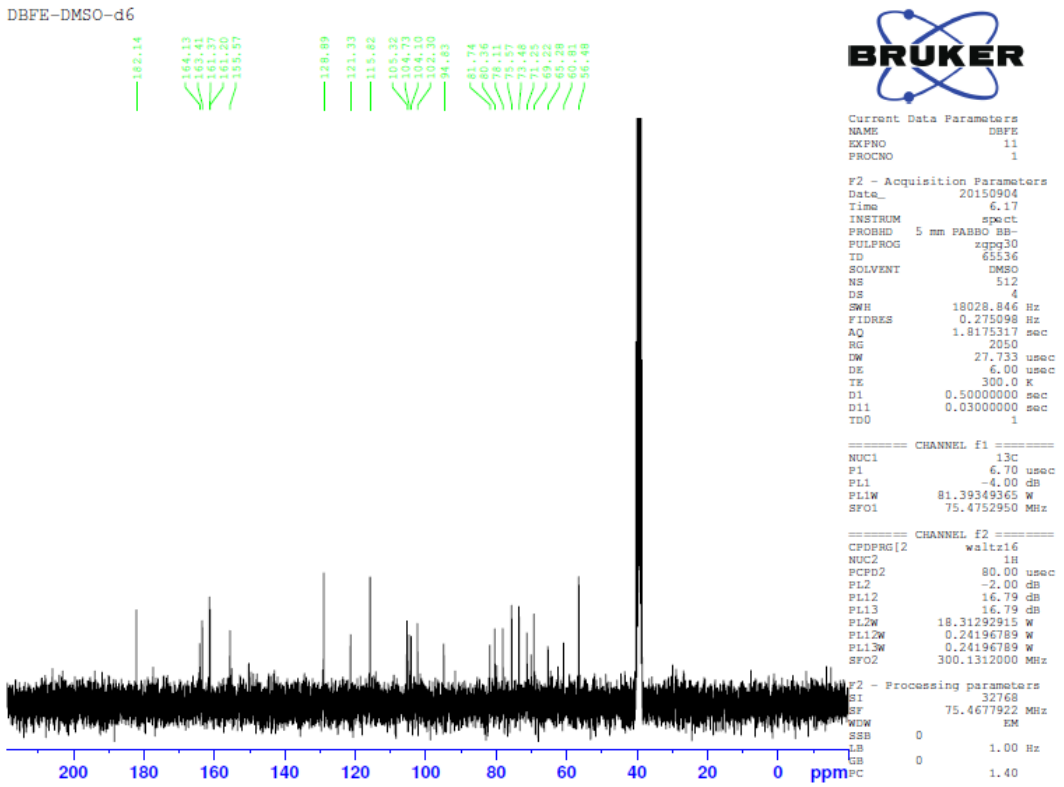

Fig. S7 ^{13}C NMR spectrum of compound **1**

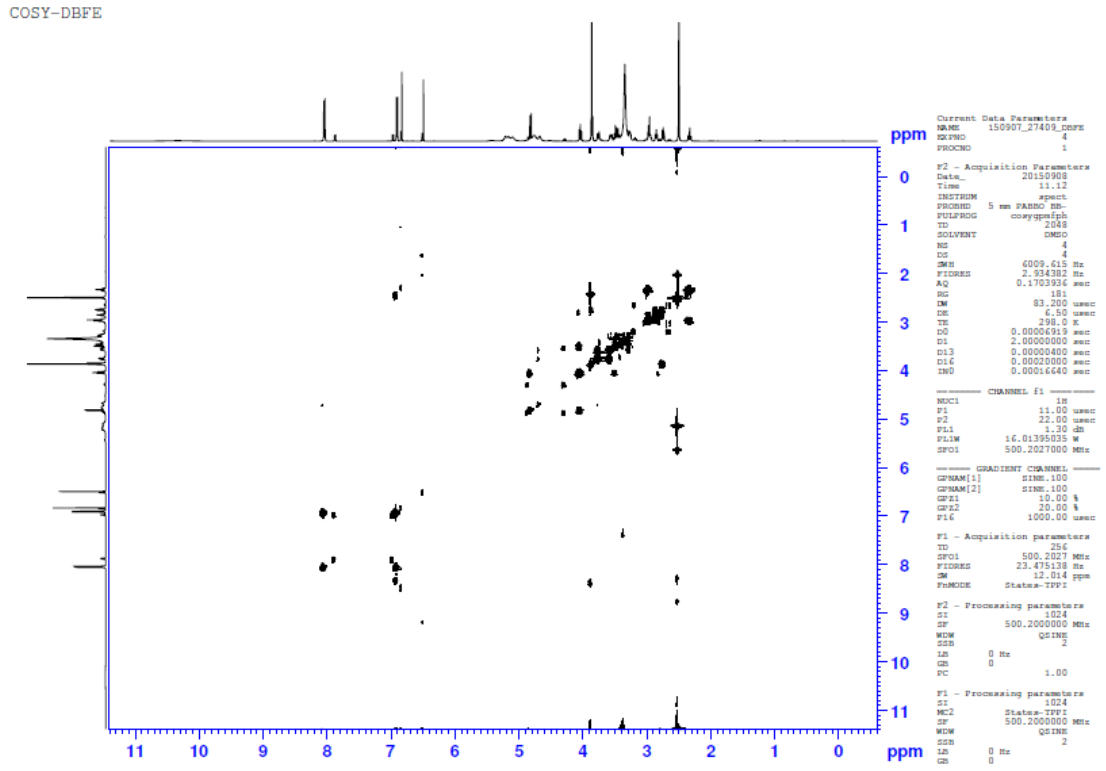

Fig. S8 ^{1}H-^{1}H COSY spectrum of compound **1**

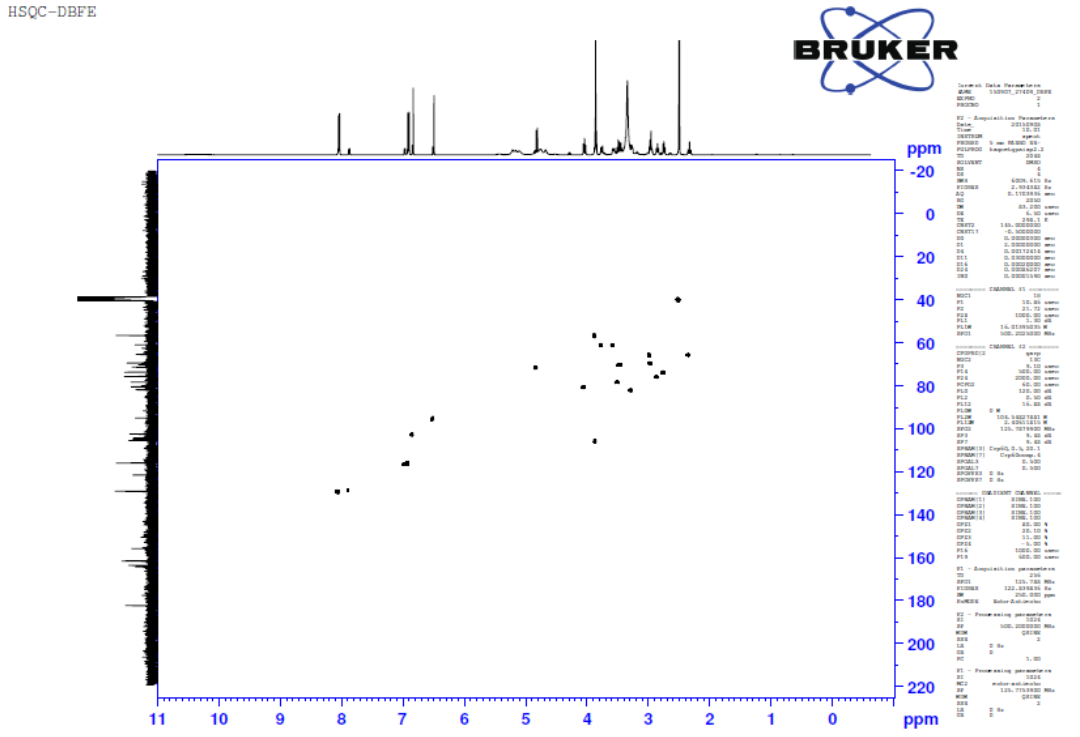

Fig. S9 HSQC spectrum of compound **1**

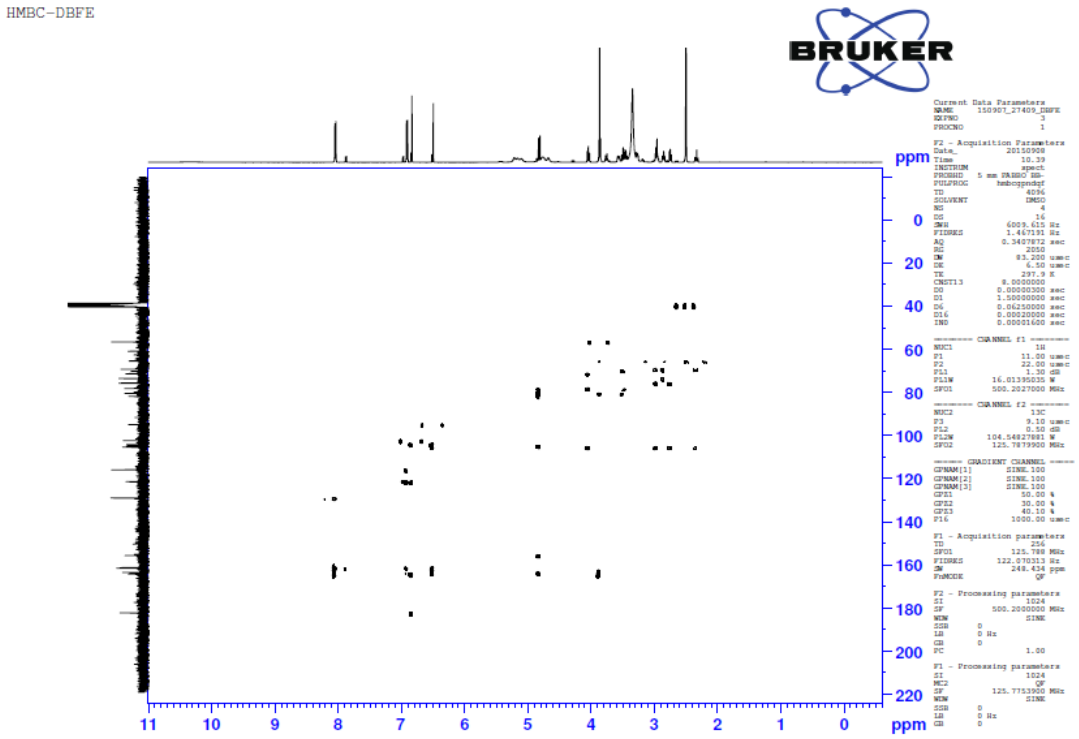

Fig. S10 HMBC spectrum of compound **1**

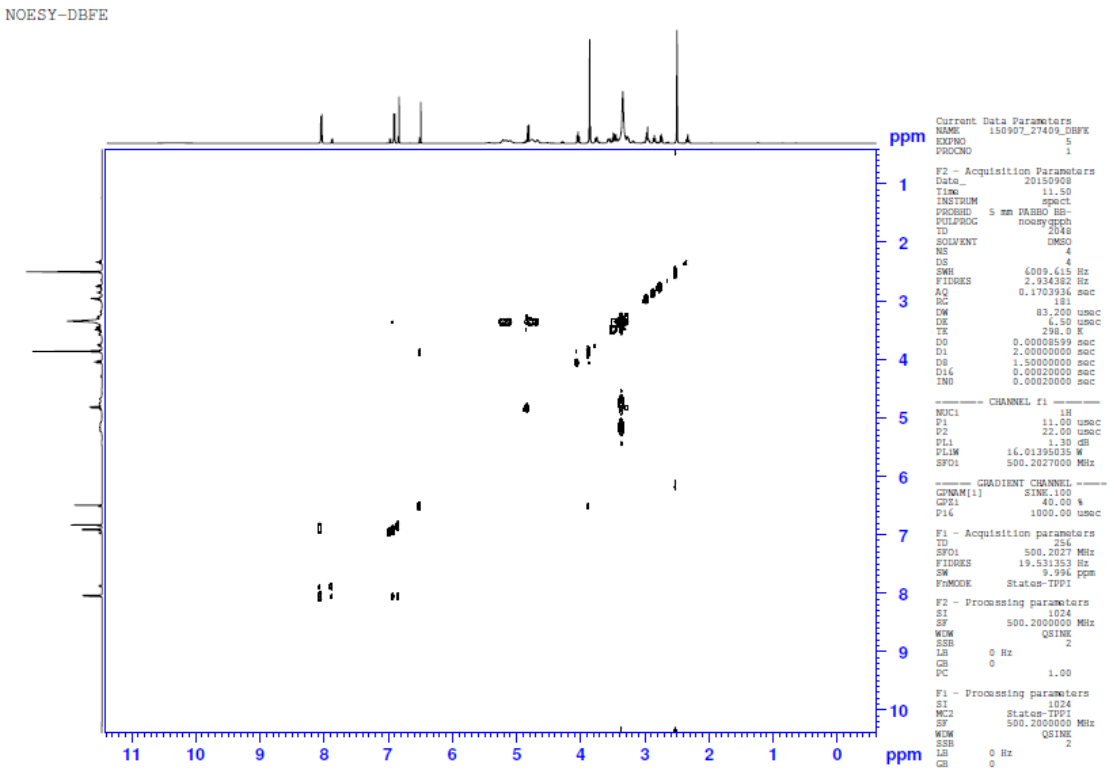

Fig. S11 NOESY spectrum of compound **1**

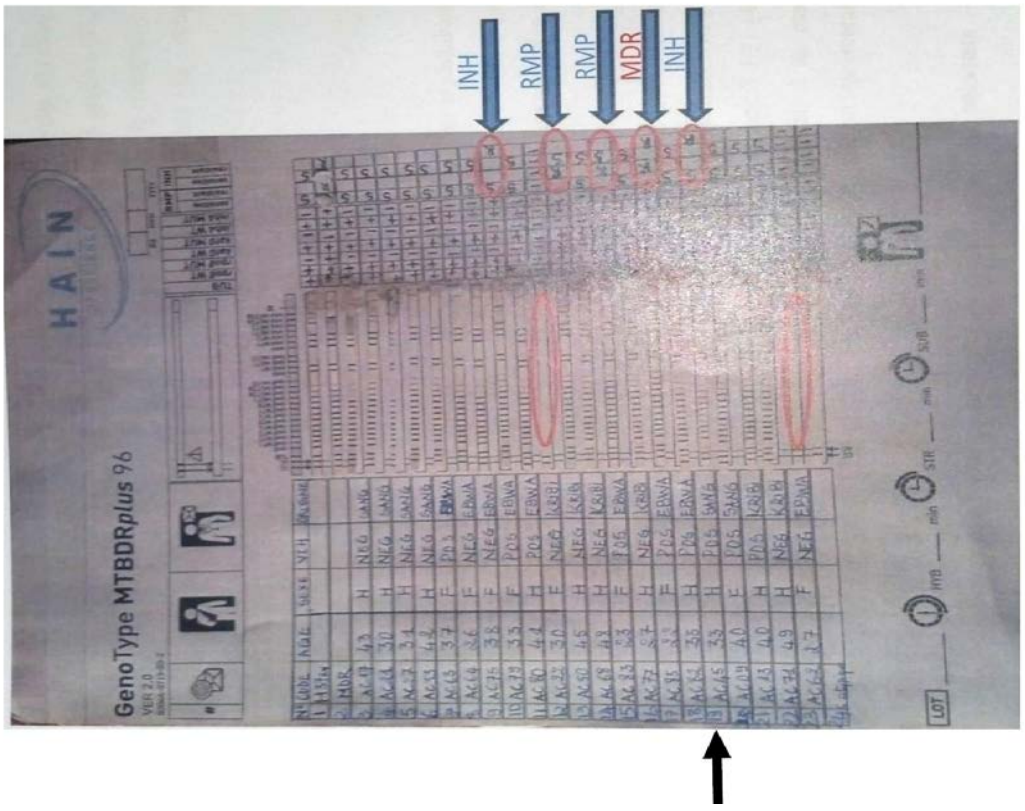

Figure S12. Genotype profile of *M. tuberculosis* codifies AC 45