Supplementary Information

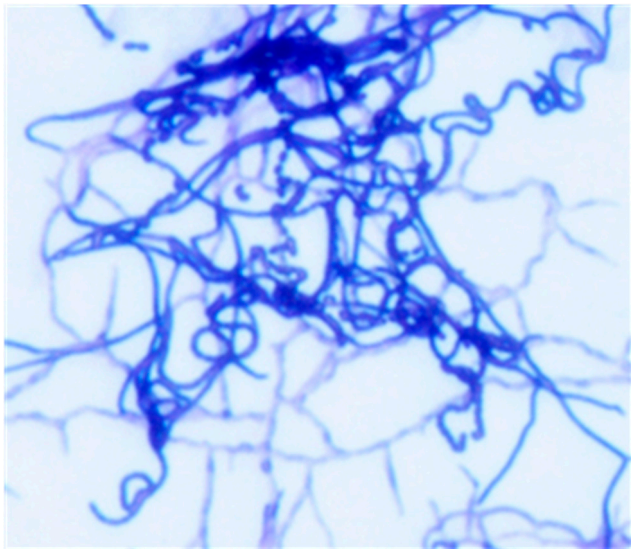

Figure S1. Photograph of *Streptomyces* strain MS-6-6 as appeared under light microscope.

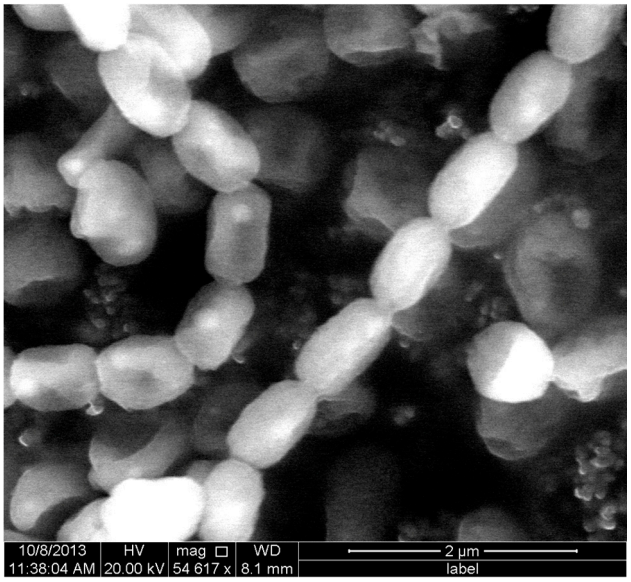

Figure S2. Electrographs of the spores of *Streptomyces* strain MS-6-6 as appeared under scanning electron microscope, 54,000×.

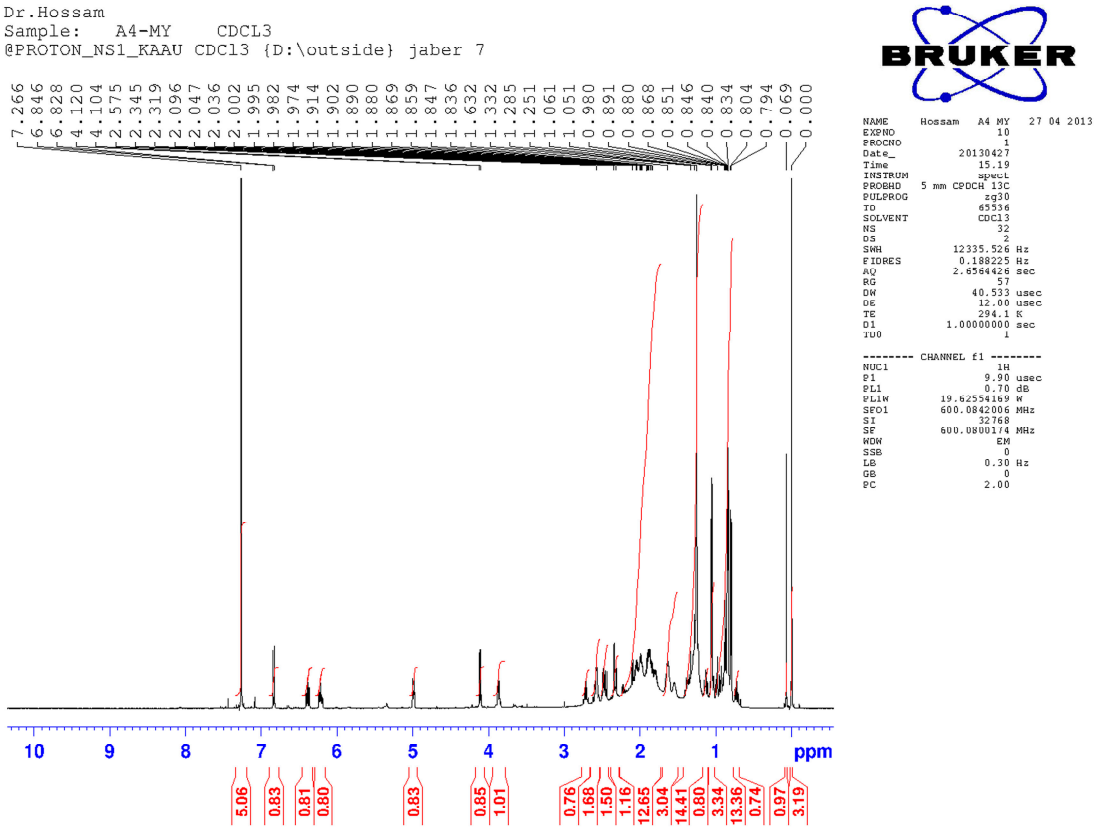

Figure S3. ^{1}H-NMR of compound (MYA-3) ($CDCl_3$).

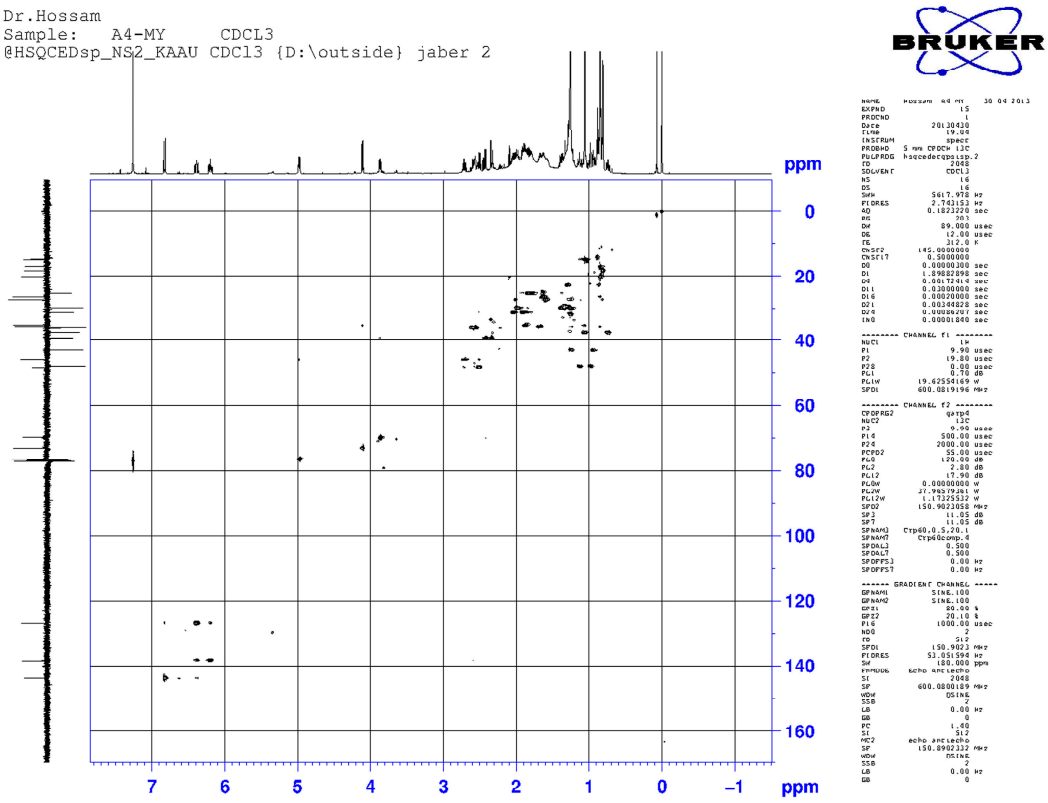

Figure S4. HSQC of compound (MYA-3) ($CDCl_3$).

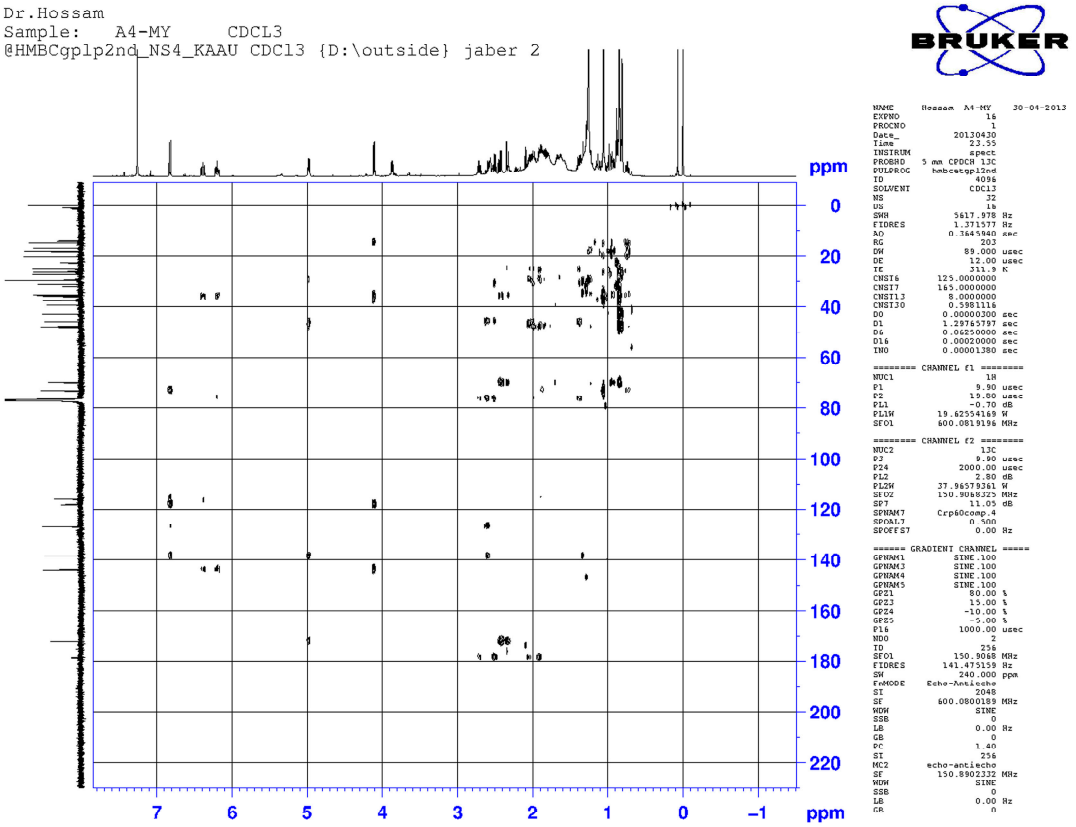

Figure S5. HMBC of compound (MYA-3) ($CDCl_3$).

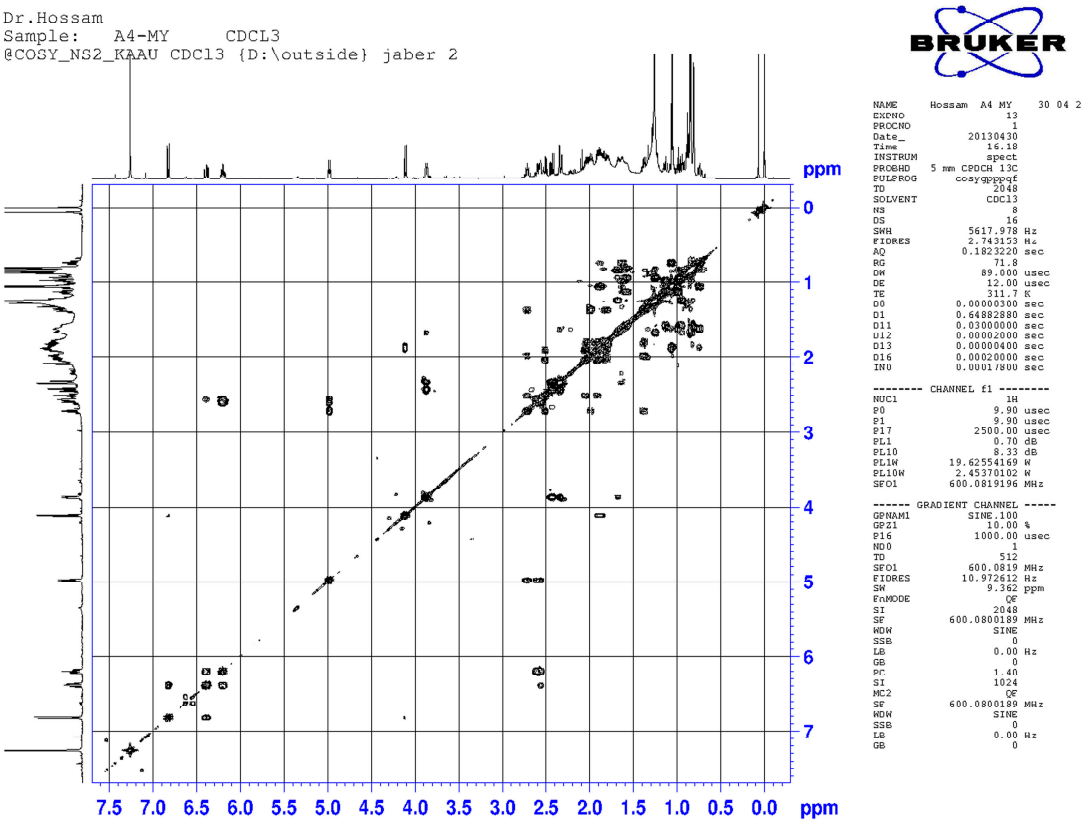

Figure S6. COSY of compound (MYA-3) ($CDCl_3$).

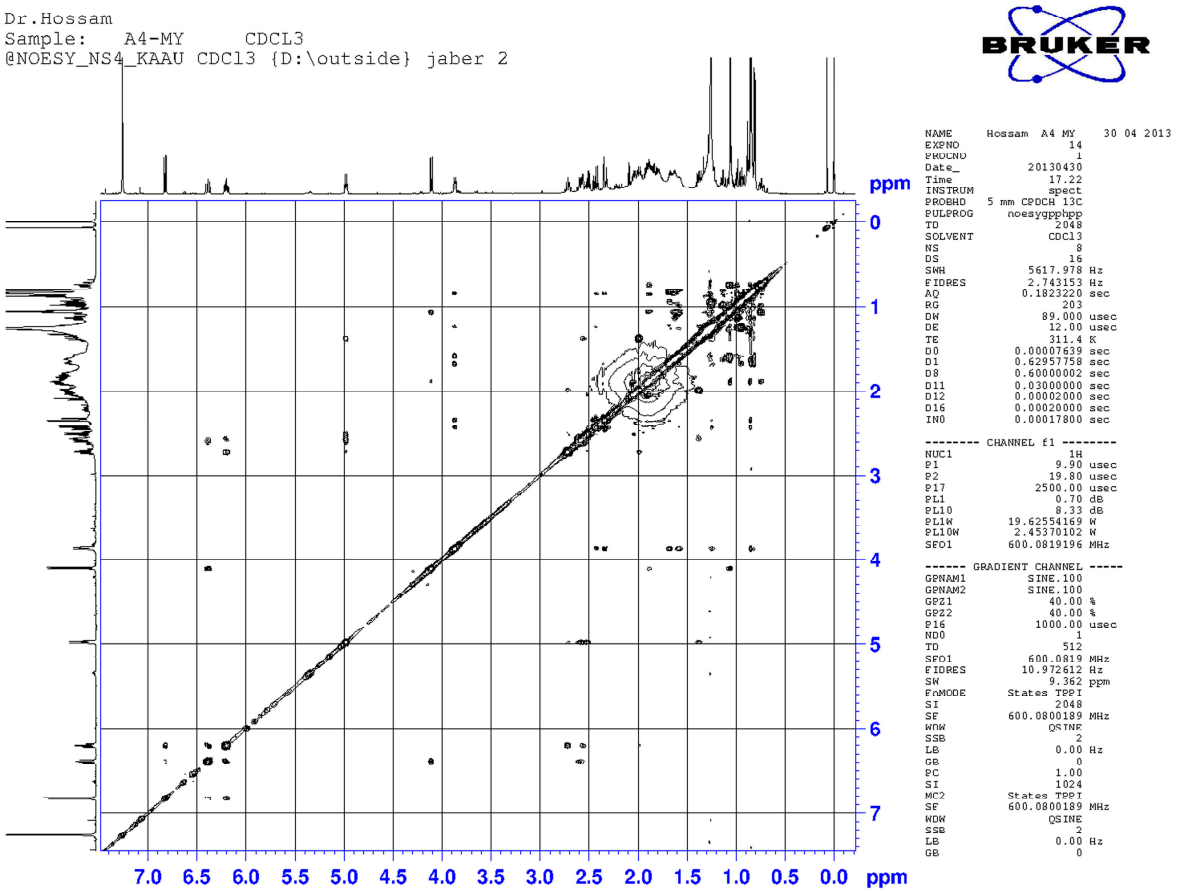

Figure S7. NOESY of compound (MYA-3) ($CDCl_3$).

Table S1. The *Streptomyces* isolates that showed different degrees of anti-tuberculous activity.

Level of Activity (Inhibition Zones/mm)	Number of Isolates in Each City					Total
	Jeddah	Al-Medinah	Makkah	Altaif	Rabigh	
Weak (≤15 mm)	39	23	14	38	4	118
Intermediate (15–20 mm)	11	6	4	6	2	29
Strong (≥20 mm)	3	2	1	1	1	8
Total	53	31	19	45	**7**	155

Table S2. Morphological and physiological properties of the Streptomyces strain MS-6-6.

Characters	Results
Spores	Spores have Rectiflexibiles spore chains, (straight to flexuous). Spore surface is smooth to slightly warty. Spore mass is gray. Reverse color is light brown diffusible pigments.
Growth temperature range	Growth occurred at 20, 25, 30 and 37 but no at 50 °C
Growth pH range	Growth occurred at the pH range of 5.7–8.4, optimum growth was at pH 7
Oxygen requirement	No growth occurred under anaerobic condition
Starch hydrolysis	Positive
Gelatin hydrolysis	Positive
Casein hydrolysis	Positive
Nitrate reduction	Negative
H_2S formation	Negative
Cellulose utilization	Negative
Melanin production	Negative

Table S3. Utilization of compounds as a sole source of carbon by *Streptomyces* strain MS-6-6.

Carbon Source	Results
No carbon	(−)
D-Glucose	(+)
D-Fructose	(+)
Lactose	(+)
Sucrose	(−)
Raffinose	(+/−)
D-Mannitol	(+)
meso-Inositol	(−)
L-Arabinose	(+)
Salicin	(+)
D-Galactose	(+)
Maltose	(+)
Dextrine	(+)
Cellulose	(−)
Starch	(+)

(+) = visible growth; (−) = no growth.

Table S4. Susceptibility of the Streptomyces MS-6-6 to different antibiotics.

Antibiotic	Code	Sensitivity	Antibiotic	Code	Sensitivity
Cefuroxime	CXA	R	Levofloxacin	LEV	S
Cephalothin	KF	R	Norfloxacin	NOR	S
Cefoxitin	FOX	R	Ciprofloxacin	CIP	S
Imipenem	IPM	R	Ofloxacin	OFX	S
Ceftazidim	CAZ	R	Moxifloxacin	MXF	S
Ceftriaxone	CRO	R	Nalidixic acid	NA	R
Amoxicillin clavulanic acid	AMA	R	Sulfamethoxazol/Trimethoprime	SXT	S
Oxacillin	OX	R	Doxycycline	DO	S
Piperacillin	PRL	R	Tobramycin	TOB	S
Aztreonam	ATM	R	Streptomycin	S	S
Cloxacillin	OB	R	Gentamicin	CN	S
Bacitracin	B	R	Novobiocin	NV	S
Aminocidin	AN	S	Metronidazol	MET	R
Fucidic acid	FD	R	Rifampicin	RA	R
Teicoplanin	TEC	S	Chloramphenicol	C	R

Sensitive (S) ≥ 15 mm; Resistance (R) < 15 mm.

Table S5. Antimicrobial activities of the A-1, A-2, and A-3 fractions.

Organisms	Inhibition Zones (mm)		
	A-1	A-2	A-3
Mycobacterium tuberculosis	--	14	24
Staphylococcus epidermidis	--	15	22
Streptococcus pyogenes	--	14	20
Bacillus subtilis	--	13	19
Escherichia coli	--	11	17
Clostridium perfringens	--	--	15
Brucella melitensis	--	--	16
Pseudomonas aeruginosa	--	--	15
Proteus mirabilis	--	11	16
Candida albicans	--	--	15

A-1, A-2 and A-3 are fractions collected after application of MS-6-6 growth supernatant on Diaion HP-20 using water, methanol/water and methanol, respectively.