



SDI Review Form 1.6

Journal Name:	British Microbiology Research Journal
Manuscript Number:	2014_BMRJ_14627
Title of the Manuscript:	Evaluation of Antibiotic Biosynthetic Potential of Actinomycetes Isolates to Produce Novel Antimicrobial Agents
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	The authors described the evaluation of antibiotic biosynthetic potential of actinomycetes to produce novel antimicrobial agents. This manuscript could be considered for publication in BMRJ, but some major revisions should be regarded by the authors before the manuscript could be accepted in this journal. General Comments: 1) The term "novel" needs to be remove from the title and the "study design" and "conclusion" in the abstract. 2) Insufficient citations from recent work in the study of PKS and NRPS genes in actinobacteria, authors should refer to recent work such as "Diversity and antimicrobial activities of Actinobacteria isolated from tropical mangrove sediments in Malaysia" published in The Scientific World Journal by Lee et al., 2014, also "Isolation, diversity, and antimicrobial activity of rare actinobacteria from medicinal plants of tropical rain forests in Xishuangbanna China" published in Applied and Environmental Microbiology by Qin et al., 2009. Results of these works should be included in the discussion section. 3) Citations are needed for content in line 26-30, 43. 4) Line 44: Remove "isolate" and replace with "discover potentially". 5) Line 55: List the gram negative and positive bacteria used in the antibacterial assays. 6) Line 114-117: Insufficient results were given in this section. Authors need to show what kind of pathogens is killed by the Actinobacteria. 7) Figure 3: This figure showed unspecific band at lane 3 and lane 5 and lane 11, which indicate that the PCR conditions are not optimum for this primer to be amplified a specific band. Suggesting	1. The word novel has been removed from the title, study design and conclusion in the abstract. 2. The suggested citations have been included into the manuscript. 3. New citations have been added. 4. The word isolate has been replace with discover potentially. 5. This was published in another journal and the citation has been added. 6. The reference has been cited. The expected band size was excise and purity before sending sequencing but was not rerun on agarose gel due to quantity but the purity was



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	authors to increase the annealing temperature to increase primer specificity. 8) Line 195-198: Change legend of Figure 4 to “Neighbour-joining tree (Saitou and Nei, 1987) based on 16S rRNA gene sequences showing relationships between actinomycetes strains and representatives of related taxa. Bootstrap value (>50%) based on 1000 resampled datasets are shown at branch nodes. Bacillus subtilis and Bacillus tequilensis are used as outgroup” Use this as a template to change legend of Figure 5 and Figure 6 accordingly as well. 9) The bootstrap value of Fig. 4, 5 and 6 should not overlay with the lines in the tree. Adjust the position of these numbers accordingly. 10) All of the strains in all the figures should have the genus information, such as “Streptomyces sp. NWU175” instead of “NWU175”. 11) Figure 4, 5 and 6, Bacillus subtilis and B. tequilensis must be mentioned as outgroup in the figure legend. 12) All the type strains must have strain number, such as “Streptomyces sp. DSM 20530” in all the phylogenetic trees. 13) Line 309-310: It is mentioned “fermentation extracts from...”. Did authors use any fermentation broth to perform antibacterial assays in this study? If yes please mention the name and composition of the fermentation broth used.	quantify using a nano drop. This change has been implemented accordingly. This has been adjusted We believe this will make the tree look too cumbersome This has been added to the legend We think that is the justification of accession number to give full information about the strain. The statement was for further research been carried out on the project.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		