

Review Form 1.6

Journal Name:	Asian Journal of Research in Biochemistry
Manuscript Number:	Ms_AJRB_70876
Title of the Manuscript:	Effects of some alkali and alkaline earth metal ions on the initial velocities of <i>Congregibacter litoralis</i> KT71 β -lactamase hydrolysis of 4-nitrophenyl myristate.
Type of the Article	Original Research Article

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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:

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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		
Minor REVISION comments	<p>The paper reports on the effect of some alkali metal (Na^+, K^+) and alkaline earth metal (Mg^{2+}, Ba^{2+}) ions on the initial velocities of <i>Congregibacter litoralis</i> KT71 β-lactamase hydrolysis of 4-nitrophenyl myristate. Different concentrations of the studied ions were tested in the study. The results of the study highlighted that alkaline earth metal ions exhibited higher enzyme activation effect with respect to alkali metal ions. Furthermore, while all metal ions (apart from Mg^{2+}) showed enzyme stimulatory effect at low concentrations, inhibitory activity was found at higher ion concentrations. The findings described herein are interesting and could lead to potential industrial applications. The manuscript is well written and results are well presented. Therefore, I recommend the publication of the paper in <i>Asian Journal of Research in Biochemistry</i> after minor revision. There are indeed a few points that should be addressed in order to improve the quality of the manuscript.</p> <ul style="list-style-type: none"> - A brief paragraph describing the experimental details of the study should be provided (A typical procedure, including volumes of buffer, amount of substrate, ... used for the enzymatic assay). - Do the authors have a possible explanation for the fact that metal ions showed enzyme stimulatory effect at low concentrations and inhibitory activity at higher concentrations? - There are a few typing/grammar mistakes (es. Suggest instead of suggests at the end of page 5). Please, carefully check throughout the manuscript. <p>As a suggestion for future studies, it would be interesting to evaluate the effect of all alkali and alkaline earth metal ions (<i>i.e.</i> from Li^+ to Cs^+). Although their effect is reasonably negligible in nature, it could be valuable for industrial applications.</p>	
Optional/General comments		

PART 2:

	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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Damiano Tanini
Department, University & Country	University of Florence, Italy