

SDI Review Form 1.6

Journal Name:	Asian Journal of Research in Biochemistry
Manuscript Number:	Ms_AJRB_43243
Title of the Manuscript:	High-level expression and purification of DNA and DNase free Taq DNA polymerase
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that <u>NO</u> manuscript should be rejected only on the basis of '<u>lack of Novelty'</u>, 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, c and highlight that part in the manuscript. It is n should write his/her feedback here)
Compulsory REVISION comments	 <i>Major concerns:</i> To overproduce the polymerase <i>E. coli</i> DH5α strain was used. However, a type of expression vector has been not given. I have found only such information (lanes 44-45): "The Taq DNA polymerase was transformed by heat shock method into <i>E. coli</i> DH5α competent cells that were prepared by CaCl₂ method." It is impossible! I am sure that an appropriate recombinant plasmid carrying the Taq DNA polymerase gene was introduced to <i>E. coli</i> cells. Which expression vector was used to obtain the recombinant protein? How was the recombinant vector created? Lanes: 46-47 and lanes 118-119: What is the sequence of specific primers that were used to confirm the presence of the Taq DNa polymerase gene in any vector? Description of the method used to determine DNase activity (lane 95) is incomplete and there occurred mistakes. Image descriptions are unreadable. Fig. 2 contains four panels (not two) and each of them should be described in the figure legend, because each panel presents something different; proteins separated by gel electrophoresis were visualized using different staining procedures. Clinical samples should be described (lanes 110-115). ethical issues: In this study, different clinical samples were used to test DNA polymerase activity. Unfortunately, the origin of these samples has been not given. I am afraid that author(s) should obtain research ethical approval before beginning the study from local ethics committees to use biological/clinical material 	
Minor REVISION comments	Lane 111: It should be <i>Acinetobacter</i> spp. instead of <i>Acinetobacter</i> sp. Lane 114: There occurred a mistake in a name of bacterium ; it should be <i>Tubercle bacilli</i> instead of tubercular bacilli)	
Optional/General comments	The manuscript describes a good purification strategy that can be used to obtain high-quality Taq DNA polymerase. The manuscript requires extensive editing of English language and style.	

Reviewer Details:

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er, correct the manuscript is mandatory that authors