

# Review of: "The Denaturation and Renaturation Kinetics of $\beta$ -Galactosidase by Chemical Denaturants in The Presence of Galactose, a Product Inhibitor"

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Potential competing interests: No potential competing interests to declare.

Unfortunately, despite the efforts of the author, I regret to say that there is no real merit to this paper. The kinetic analysis is incorrect and quite incomplete and I honestly would not know where to start correcting. I do not see the basis for making any robust conclusions based on this work.

On the editorial level, the article needs a thorough read through. There are typos, large mid-sentences, huge sentences, overuse of parentheses and interposed sentences, and even multiple sentences within a single parenthesis.

There is a huge body of work on protein inactivation which the author seems to ignore. In addition, I miss arguments as to why a beta-galactosidase is a good model for protein-denaturant-ligand studies and why this specific beta-galactosidase is useful in particular.

As far as I can see, the author reuses totality of the data from his previous article (PMID: 18341246) and reevaluates the data (incorrectly) with a new model that includes product-inhibiting effect (EI). This is in itself of some concern, especially when the methods section includes description of protein purification and the entirety of the figures stated to be *Adapted from [61]* while being slightly different from the original publication. If the purpose of this publication is the reevaluation of previous results, then numeric values, comparison to previous values, and statistical comparisons should be included and emphasized.