

Dear Editor,

We hereby submit online our revised manuscript NO: 58167 entitled: **“Mirk/DYRK1B implication in stem/cancer stem cells biology”** by Nikolaos Kokkorakis and Maria Gaitanou, which we wish to submit for publication in *World Journal of Stem Cells* for the upcoming special issue.

With respect to all reviewers' comments we have revised our manuscript. Given that three reviewers considered our manuscript as acceptable for publication, we revised the text according your comments and the suggestions of the Reviewer #2, 03813908. In order to improve our manuscript and make it easily readable, we have rearranged the content dividing the text into four main sections such as: Introduction, Function, Mechanism and Conclusions.

Moreover, we have shorten the text, removing the paragraph about DYRK1A kinase, while we have integrated the rest information in the section of Introduction. In addition, we merged three parts concerning regulation of DYRK1B expression and activity, intracellular localization and expression patterns under the title: DYRK1B expression, intracellular localization and upstream regulation. We have also added two new parts about “DYRK1B kinase functions “and “Molecular mechanisms of DYRK1B function in development and human diseases”. Finally, we have rephrase some repeated sentences in order to reduce the deduced cross-check score. All changes are represented in the manuscript in red. Moreover, we provide you the two original figures in a Power Point format.

We therefore feel that our revised manuscript satisfies all the Reviewers' comments, is of broad interest to the wide readership of the *World Journal of Stem Cells* and meets all the criteria for publication in the upcoming special issue.

Hoping that you will find everything in order.

Sincerely,

Dr. Maria Gaitanou

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