Answering Reviewers

Dear editor:

At first, we deeply appreciate the approbations and the comments made by the reviewer and we will present a point-by-point response to each comment in the next part.

Reviewer's code: 01047558

Reviewer's report: - Why the comparison between the 5-ASA group and the others groups was not reported? Only the body weight, the length of colon and histological analyses were reported. - In the DSS-group compared with the control group, there was an increase expression of pro-inflammatory signaling pathways but also the levels of IκB (Inhibitor of NF-κB). This result must be discussed.

Response: We are very grateful for these constructive suggestions. - As the purpose of this research is to explore the potential mechanisms and effects of AMP on UC, we first verified the efficacy of AMP on UC, where a positive control (5-ASA) was necessary as a contrast to examine the curative effect. However, since the positive control was not necessity when we next explored the mechanisms of AMP on UC, the 5-ASA group was not included in this part. - Just as the review said, there was an increase expression of pro-inflammatory signaling pathways but also levels of I κ B in our research. Thus, we made a supplementary statement in the Discussion part as the increased expression of I κ B with PCR was in accordance with the Western blot analyses and the p-I κ B/I κ B ratio was elevated ultimately, which might be due to the feedback regulation of activated NF- κ B. In the meantime, thanks to the comments, we have also found a clerical mistake in the legend when we made repeated check. And in order to avoid the misunderstand of statistical results of Western blot analyses, we re-edited the Results part and the Figure 4.

To the editor

- 1. This paper has been revised according to peer-reviewers' comments.
- 2. The Audio core tip has been supplemented.
- 3. All the figures have been re-edited, and the labeling has been amended.

4. As supplementary material was submitted individually, we cut off this part in the revised manuscript. We are not sure whether it is appropriate, and if there are any

problems, please point out and we will make the revision.

Thanks very much for the attention and the comments from the editor and the

reviewer. And if there are any problems or questions regarding the manuscript, please

point out and we will make the revision. We look forward to the reply.

Sincerely yours,

Zhi-Peng Tang