

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 63304

Title: Diverse expression pattern of mucin 2 in colorectal cancer indicates its mechanism related to the intestinal mucosal barrier

Reviewer's code: 05775440

Position: Peer Reviewer

Academic degree: PhD

Professional title: Associate Research Scientist

Reviewer's Country/Territory: China

Author's Country/Territory: China

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Reviewer chosen by: AI Technique

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Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

1 Title. Does the title reflect the main subject/hypothesis of the manuscript? YES 2

Abstract. Does the abstract summarize and reflect the work described in the manuscript?

YES 3 Key words. Do the key words reflect the focus of the manuscript? YES 4

Background. Does the manuscript adequately describe the background, present status and significance of the study? YES 5 Methods. Does the manuscript describe methods

(e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? YES

6 Results. Are the research objectives achieved by the experiments used in this study?

What are the contributions that the study has made for research progress in this field?

YES This study supports the protective function of MUC2 in CRC. Moreover, the more secreted MUC2 in CRC patients indicates the impaired intestinal mucosal barrier. 7

Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently? YES, YES, YES 8 Illustrations and tables. Are

the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures require labeling with arrows, asterisks etc., better legends?

1) In Figure 3, the data described in Low/High expression does not correspond with the data described in Table 1. 2) More detailed legends are needed in all figures and tables 9 Biostatistics. Does the manuscript meet the requirements of biostatistics? YES

10 Units. Does the manuscript meet the requirements of use of SI units? YES 11

References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? YES, NO 12 Quality of

manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? YES 13 Research methods and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. Did the author prepare the manuscript according to the appropriate research methods and reporting? YES 14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics? YES This manuscript found the protective function of MUC2 in CRC. Moreover, the more secreted MUC2 in CRC patients indicates the impaired intestinal mucosal barrier. The author concluded that MUC2 in intestinal tissues might play a protective role in the intestine and could be used as an indicator to evaluate the prognosis of CRC patients. Because the finding that serum MUC2 concentration is positively related to advanced tumor stage and distant metastasis, whether the secreted MUC2 can aggravate the condition of CRC and what's the mechanism would be interesting.