

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastrointestinal Oncology*

Manuscript NO: 83325

Title: Core fucosylation and its roles in gastrointestinal glycoimmunology

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05656372

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: China

Manuscript submission date: 2023-01-18

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-01-19 07:44

Reviewer performed review: 2023-01-20 04:44

Review time: 21 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
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

The manuscript summarized the latest research progress about the function and mechanism of Core Fucosylation in gastrointestinal glycoimmunology. This study provided a great significance for the research of Core Fucosylation, especially for the application in gastrointestinal tumor treatment. I think this manuscript could be accepted with some modification. My main concern is: the title of the manuscript is 'Regulation of Core Fucosylation in Gastrointestinal Glycoimmunology', however, the text structure was arranged by the different mechanisms of Core Fucosylation, although each part has supporting studies from gastrointestinal diseases. It is better to present the adjustment in table or figure form, summary the role of Core Fucosylation in gastrointestinal diseases. which might be more intuitive;

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastrointestinal Oncology*

Manuscript NO: 83325

Title: Core fucosylation and its roles in gastrointestinal glycoimmunology

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 01518946

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Professor, Research Fellow, Senior Consultant Dermatologist

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2023-01-18

Reviewer chosen by: Yu-Lu Chen

Reviewer accepted review: 2023-02-15 23:06

Reviewer performed review: 2023-02-20 06:08

Review time: 4 Days and 7 Hours

Scientific quality	<input checked="" type="checkbox"/> Grade A: Excellent <input 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
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input 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

This manuscript describes a variety of biological function of core fucose, synthesized by alpha1-6 fucosyltransferase (Fut8) reaction in gastrointestinal immunology and oncology. The authors cited many papers in this research field and described summary of each study. These contents seem to be fruitful for future study of glycobiology. However, the authors failed to cite original papers of Fut8 in terms of biochemistry. To increase core fucosylation in cells, GDP fucose levels and expression levels of GDP-fucose transporter are more important than expression levels of Fut8. The summary of these biochemical data were described in following papers (J Biochem. 2008 Jun;143(6):725-9. doi: 10.1093/jb/mvn011. and Biochem. Biophys. Rep. 2022 Oct 25;32:101372. doi: 10.1016/j.bbrep.2022). The authors should cite original papers about Fut8 biochemistry to improve this review manuscript.