

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

ESPS manuscript NO: 31540

Title: Syndecan-1-coating of IL-17-producing NKT cells provides a specific method for their visualization and analysis

Reviewer's code: 01851506

Reviewer's country: Japan

Science editor: Fang-Fang Ji

Date sent for review: 2016-11-24 18:20

Date reviewed: 2016-12-31 09:12

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|--|---|--|---|
| <input type="checkbox"/> Grade A: Excellent | <input type="checkbox"/> Grade A: Priority publishing | Google Search: | <input type="checkbox"/> Accept |
| <input checked="" type="checkbox"/> Grade B: Very good | <input checked="" type="checkbox"/> Grade B: Minor language polishing | <input type="checkbox"/> The same title | <input checked="" type="checkbox"/> High priority for publication |
| <input type="checkbox"/> Grade C: Good | <input type="checkbox"/> Grade C: A great deal of language polishing | <input type="checkbox"/> Duplicate publication | <input type="checkbox"/> Rejection |
| <input type="checkbox"/> Grade D: Fair | <input type="checkbox"/> Grade D: Rejected | <input checked="" type="checkbox"/> Plagiarism | <input type="checkbox"/> Minor revision |
| <input type="checkbox"/> Grade E: Poor | | [Y] No | <input type="checkbox"/> Major revision |
| | | BPG Search: | |
| | | <input type="checkbox"/> The same title | |
| | | <input type="checkbox"/> Duplicate publication | |
| | | <input type="checkbox"/> Plagiarism | |
| | | <input checked="" type="checkbox"/> No | |

COMMENTS TO AUTHORS

This review describes the importance of SDC-1 (CD138) as a cell surface marker for IL-17 producing NKT cells (NKT17). Although the authors tried to introduce SDC1 in terms of biological function and explain its significance in NKT cell biology, the reviewer cannot follow the logic that the authors have identified SDC1 as a NKT17 marker. Apart from this, the manuscript is well written and can readily be understood by readers who are not expert of NKT cell biology. Beside the above point, I have several minor concerns as follows. Core tip IFN- γ , IL-4 (NKT2) and IL-17 (NKT17). IFN- γ (NKT1), IL-4 (NKT2) and IL-17 (NKT17) is better to distinguish NKT subsets according to their cytokine profile.

Background utilization of NKT cells in functional in vitro and in vitro assays that require viable cells. Considering the whole context, the reviewer believes that "utilization of NKT cells in functional in vitro and in vivo assays that require viable cells. is adequate. Introduction In this this article, Should

be “in this article”. Figure 1 Why the authors use iNKT in this figure, while NKT cell is used in the text. The reviewer recommends using only one term to avoid any confusion. I wonder whether there is a relationship between SDC1 expression and that of ROR γ t in NKT17 cells. If there is, please explain it briefly.

Answering to reviewer’s comments:

The manuscript has been improved according to the suggestions of reviewers. All the changes made in manuscript, were shown in **green**.

This review describes the importance of SDC-1 (CD138) as a cell surface marker for IL-17 producing NKT cells (NKT17). Although the authors tried to introduce SDC1 in terms of biological function and explain its significance in NKT cell biology, the reviewer cannot follow the logic that the authors have identified SDC1 as a NKT17 marker.

Response: Thanks for this important question and we are happy to give a little of the history of this discovery. Briefly, we have previously shown that SDC-1 is expressed on double-negative T cells (DN T cells) that accumulate in *lpr* and *gld* mice ([Mohamood et al, 2008, PLoS ONE 3\(10\) e3465](#)). After that we sought to know if SDC-1 express in innate cells. We detected SDC-1 in a subset of NKT cells. We sorted and analyzed NKT cells subsets by genome-wide gene profiling using microarrays and identified SDC-1 is specifically expressed on the IL-17-producing subset of NKT17 cells ([Dai et al, Eur J Immunol. 2015 Nov;45\(11\):3045-51](#)). These sentences were included in the manuscript (First paragraph)

Apart from this, the manuscript is well written and can readily be understood by readers who are not expert of NKT cell biology. Beside the above point, I have several minor concerns as follows. Core tip IFN- γ , IL-4 (NKT2) and IL-17 (NKT17). IFN- γ (NKT1), IL-4 (NKT2) and IL-17 (NKT17) is better to distinguish NKT subsets according to their cytokine profile.

Response: We thanks to reviewer for word of appreciation. As suggested, we have replaced IFN- γ with IFN- γ (NKT1) and included in the manuscript.

Background utilization of NKT cells in functional in vitro and in vitro assays that require viable cells. Considering the whole context, the reviewer believes that “utilization of NKT cells in functional in vitro and in vivo assays that require viable cells. is adequate.

Response: As indicated by the reviewer “in vitro” has been corrected to “in vivo” and included in the manuscript.

Introduction In this this article, Should be “in this article”.

Response: As pointed out by reviewer repeated word “this” has been deleted.

Figure 1 Why the authors use iNKT in this figure, while NKT cell is used in the text. The reviewer recommends using only one term to avoid any confusion.

Response: As pointed out by reviewer iNKT has been changed to NKT throughout the manuscript.

I wonder whether there is a relationship between SDC1 expression and that of RORyt in NKT17 cells. If there is, please explain it briefly.

Response: There is no known relationship so far.

I addition, we attached; Revised manuscript, Answering reviewers, Copyright assignment, Audio core tip, Conflict-of-interest statement and Google Scholar search pdf.

All the authors concur with the submission of the manuscript which is not under consideration elsewhere.

The authors declare no conflict of interest.

Thanks again for the opportunity and consideration,

Sincerely,



Abdel Hamad