

Author Feedback :

I, along with my coauthors, would like to ask you to consider the attached manuscript entitled “Lectin-like oxidized LDL receptor 1 mediates the uptake of the C-terminal domain of Hsp70 (a promising immune adjuvant molecule) and antigen peptide complexes” for publication in International Journal of Biochemistry Research & Review as an Original Research Papers. The manuscript is the revised version of the manuscript (2013_IJBcRR_8699).

We thank the reviewers for their careful comments on our previous manuscript. The point-by-point responses to the reviewers' comments are given in the other attached file.

Recently, efficient cross presentation of antigenic peptide bound to Hsp70 or the substrate-binding domain of Hsp70 (C70) was demonstrated. Moreover, it has been indicated that C70 could be sufficient for immune-adjuvant activity. However, the receptor mediating the uptake of the C70-peptide complex is unclear. In this study, we aimed to determine the receptor mediates the uptake of antigenic peptide bound C70. We demonstrated that lectin-like oxidized low-density lipoprotein receptor 1 (LOX-1) is responsible for this, and that C70 is easy to prepare as a recombinant protein and much more stable than full-length Hsp70. Our results indicate that C70 may have therapeutic potential as an immune adjuvant.