

June 03, 2019

Editors-in-Chief

JoVE

Dear Editors:

Enclosed please find our manuscript entitled “Stem cell-derived viral Ag-specific T lymphocytes suppress HBV replication in mice” by Xiong *et al.*, which we would like to submit for publication in *JoVE*.

The study presented in this protocol aimed to demonstrate that viral antigen (Ag)-specific CD8⁺ T cells (CTLs) from pluripotent stem cells (PSCs), i.e., PSC-CTLs, suppress HBV replication in a murine model. We believe that two novel methods of this study will make it interesting to general readers of *JoVE*. First, we establish the generation of functional viral Ag-specific CTLs from the induced PSC (iPSCs), i.e., iPSC-CTLs. Second, we reveal that adoptive transfer of viral Ag-specific iPSC-CTLs greatly suppresses HBV replication in an animal model and prevents the HBV surface Ag expression on hepatocytes. These results indicate that stem cell-derived viral Ag-specific CTLs can markedly suppress the HBV replication.

We affirm that all of the authors concur with the submission of this manuscript, and that the methods of this manuscript have not been previously reported. Additionally, we have no conflicting financial interests, and would be happy to discuss with you about our results, if needed.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Jim Song".