1 Alewife Center, Suite 200 Cambridge, MA 02140 tel. 617.401.7770, ext. 701 www.JoVE.com

Dear Author(s),

This document is divided into a number of sections in which you can add your comments to the video, voiceover, and online text/PDF. Please be aware that our policy is to do a single complimentary revision, so it is critical that all participants in this project offer their comments collectively. In addition, please make sure that your comments are easily interpreted and transparent.

Have fun!

<u>Protocol Name:</u> Merging Ion Concentration Polarization Between Juxtaposed Ion Exchange Membranes to Block the Propagation of the Polarization Zone

Date: December 14, 2016

Authors and Affiliations

Please fill in any missing author information not included in the video.

Order	Author	Affiliation	Email

1 Alewife Center, Suite 200 Cambridge, MA 02140 tel. 617.401.7770, ext. 701 www.JoVE.com

Video Comments

Please fill in any comments you wish to make using the table below using the example as a guide. If you need more space to write, please do so below the table. **DO NOT ADD CORRECTIONS TO THE NARRATION HERE. PLEASE DO THIS IN THE AUDIO COMMENTS SECTION.**

	Time	Comment	Requested Change
	code		
Example	2:52	Onscreen text says use 0.25 mM Fluo-4	Text should say use 0.50 mM Fluo-4
1.	2:30	Protocol 3.3. (Pulling the plunger to fill the cation exchange resin) is demonstrated. However, the movement of the resin is not visualized.	Please add the movie 1(please find the attached movie file). We took the video by a microscope, and visualized that the resin was filling the channel during we pull the plunger (the right channel in the movie 1).
2.	3:36-3:38	After the protocol 4.2, the finished device is shown. However, the location of the patterned membrane is not visualized.	Please add the photo 1 (please find the attached ppt file). We took the photo by a microscope, and visualized the location of the patterned membrane and the microchannel.

1 Alewife Center, Suite 200 Cambridge, MA 02140 tel. 617.401.7770, ext. 701 www.JoVE.com

Online Text/PDF Protocol

Please use this table to address changes that need to be made to the online text/PDF document. Both the online text and PDF are generated from the HTML template of your article. Since the PDF is generated from the HTML by our conversion software, it may contain formatting errors. For major structural changes or more than 10 spelling or grammatical mistakes, we will require re-upload of the entire document.

	Protocol Step	Comment	Requested Change (highlight in bold)
Example	1.1	Step says "Centrifuge lysate at 2,000 x g."	Please correct to "Centrifuge lysate at 4,000 x g."
1.	Discussion	In the last paragraph, we want to insert the additional discussion about our recent work.	In the re-uploaded document, we added the content as follows: For example, we can modulate the merged ICP system with a tangential fluid flow, and operate it in the continuous-flow mode ³⁹ . 39. Kwak, R., Pham, V.S., Kim, B., Lan C., & Han, J. Enhanced salt removal by unipolar ion conduction in ion concentration polarization desalination. <i>Sci. Rep.</i> 6, 25349, doi:10.1038/srep25349 (2016).
2.	References	There are multiple typos to address the author "Han, J."	In the reference #4,10,15,17,29, "Han, J.Y." should be corrected to "Han, J.".