



**Fig S1. Polarization of ARPE-19 cells in tissue-culture treated plastic dish.** To determine the polarization status of the cells used in our study, we cultured ARPE-19 cells to confluence for 5 days (as used for the experimental condition in this study) on tissue culture-treated plastic (6-well plate). We then fixed the cells and labelled them with ezrin (green, a well-established apical marker for RPE) along with ZO-1 (red) to label tight junctions and DAPI (blue) to stain the nuclei. **A**, overview of ARPE-19 cells in X-Y plane. **B**, top left panel shows the X-Y plane of the region enclosed in the dashed box in **A**. To the right is the Y-Z plane of the region at the intersection of the two white lines shown in the top left panel. Below is the X-Z plane of the region enclosed in the dashed box in **A**. **C**, a 3D image of the region enclosed in the dashed box in **A**. **D**, another set of images showing polarization of ezrin to apical side of APRE-19 cells.