SUPPLEMENTARY ONLINE DATA FOR

Retinal Pigment Epithelium Cell Death is Associated with NLRP3 Inflammasome Activation by All-trans Retinal

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**SUPPLEMENTARY FIGURE S1.** Characterization of ARPE-19 cells. (A) Real-time PCR (RT-PCR) analysis of RPE cell-specific markers *Rlbp1* and *Rpe65* mRNAs in ARPE-19 cells. (B) Immunoblot analysis of RPE65 in ARPE-19 cells. GAPDH was used as a loading control.
SUPPLEMENTARY FIGURE S2. Cytotoxicity of atRAL in ARPE-19 cells. Cell viability, 3, 6 and 12 h after introduction of serial concentrations of atRAL (0, 5, 10, 15, 20 and 40 μM), was examined by MTS assay. Control cells were treated with DMSO alone.
SUPPLEMENTARY FIGURE S3. The efficiency of knockdown of the NLRP3 gene in ARPE-19 cells with specific siRNA. ARPE-19 cells transfected with NLRP3 specific siRNA (siNLRP3) or siNC were collected at 36 h post-transfection. The knockdown efficiency of NLRP3 was assessed by quantitative real time reverse-transcription polymerase chain reaction (qRT-PCR).
**SUPPLEMENTARY FIGURE S4.** The full-length blots for NLRP3 in Fig. 1B and cleaved Caspase-1 in Fig. 1F.
SUPPLEMENTARY FIGURE S5. The full-length blot for NLRP3 in Fig. 2A.
**SUPPLEMENTARY FIGURE S6.** The full-length blot for NLRP3 in Fig. 2C.
**SUPPLEMENTARY FIGURE S7.** The full-length blot for NLRP3 in Fig. 4A.
SUPPLEMENTARY FIGURE S8. The full-length blot for NLRP3 in Fig. 5A.
SUPPLEMENTARY FIGURE S9. The full-length blots for NLRP3 in Fig. 6C and Fig. 6D.