**Mitochondrial protein CMPK2 regulates IFN-alpha-enhanced foam cell formation, potentially contributing to premature atherosclerosis in SLE**

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**Supplementary table and figure legends**

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** Supplementary figure 1.** BMDMs were seeded in 96‐well plates and incubated overnight, and the medium was replaced with fresh culture medium containing the various stimulating agents indicated for 24 h. CCK‐8 reagent was added and incubated for 2 h at 37°C. The OD values for each well were read at a wavelength of 450 nm with a microplate reader. The relative cell viability in the stimulus-treated cells compared to that of the untreated cells is shown.

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**Supplementary figure 2.** Wild-type TDMs (#WT) or CMPK2-KO clones #3-2 and #3-8 were treated with IFN-α, oxLDL or IFN-α+oxLDL for 24 h. The cells were then stained with MitoSOX and DAPI and examined under confocal microscopy.

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**Supplementary figure 3. Effects of CMPK2-KO on IFN-α-induced IL-1 production and caspase-1.** Wild-type cells and CMPK2-KO clones were stimulated with IFN-α, and the levels of IL-1β in the respective supernatant were measured by Western blotting and ponceau S staining (A, upper panel). The statistics from more than three independent experiments are shown (A, lower panel). The levels of active caspase-1 were determined by flow cytometry (B, upper panel), and the statistics from more than three independent experiments are shown (B, lower panel).