

Supplementary Information

Extracellular electron transfer mediated by a cytocompatible redox polymer to study the crosstalk among the mammalian circadian clock, cellular metabolism, and cellular redox states

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Supplementary figures

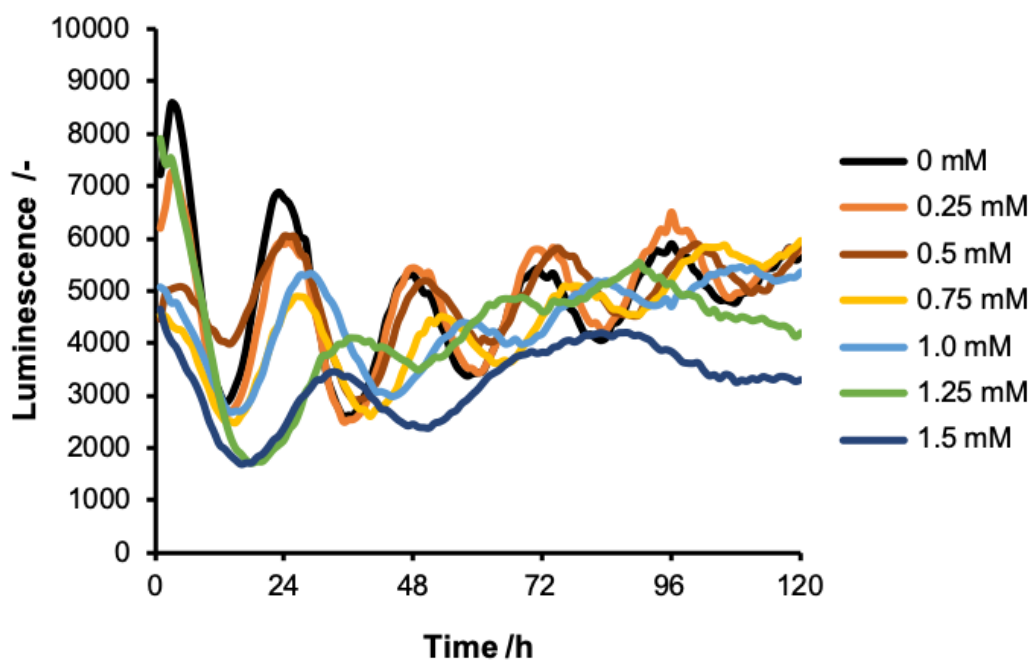


Figure S1. Representative curves of raw bioluminescence rhythm in U2OS cells in the presence of oxidized pMFc. Each concentration of pMFc corresponds to that of the vinyl ferrocene unit.

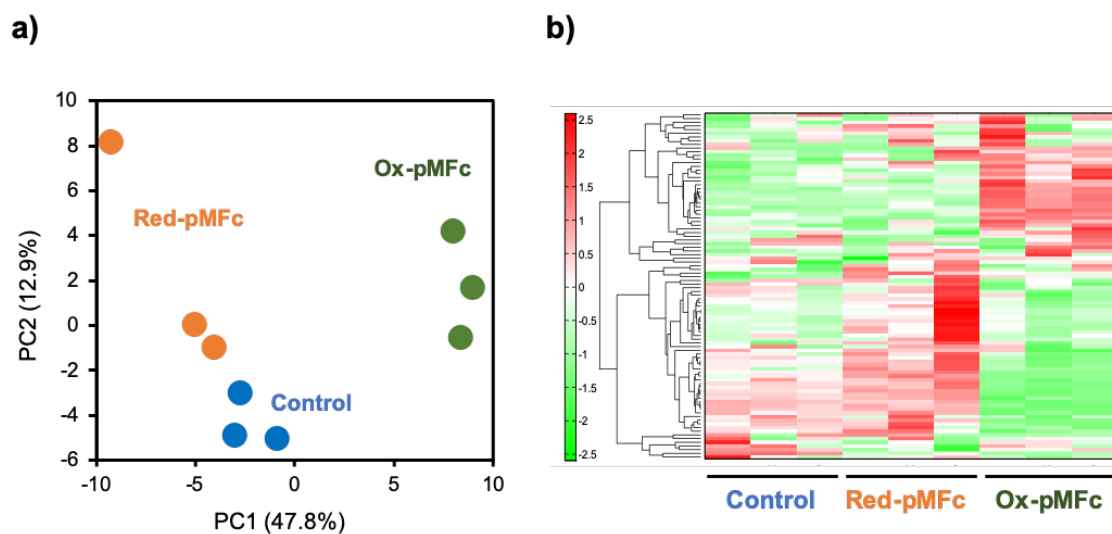


Figure S2. a) Principal component analysis and b) hierarchical cluster analysis of 116 metabolites extracted from U2OS cells treated with 1 mM of the oxidized form of pMFC (ox-pMFC) or 1 mM of the reduced form of pMFC (red-pMFC) and from untreated U2OS cells (control). The concentration of pMFC corresponds to that of vinyl ferrocene unit.

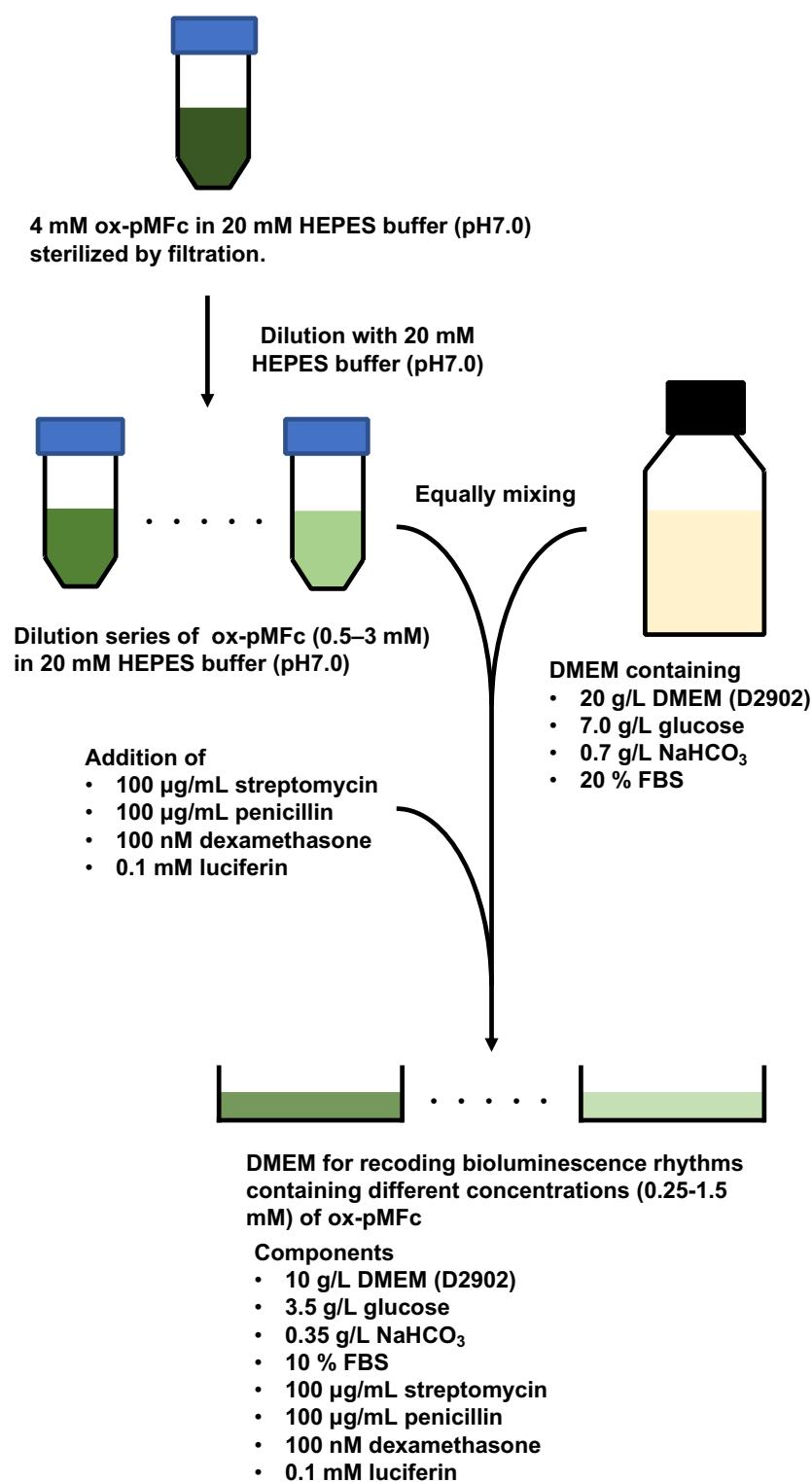


Figure S3. Schematic of the preparation of DMEM for recoding bioluminescence rhythm containing the different concentrations of ox-pMFC.

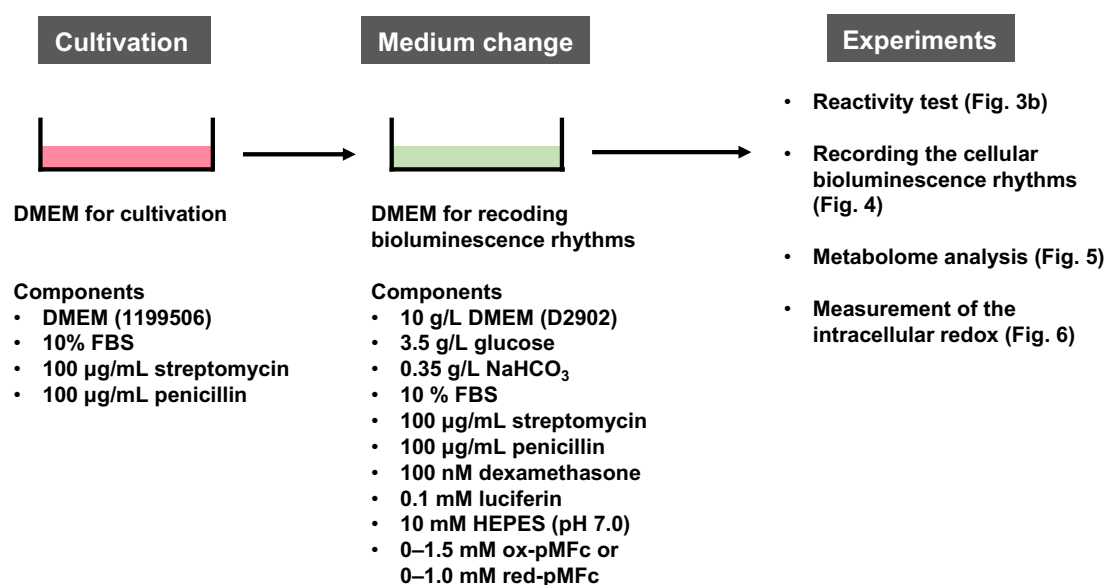


Figure S4. Schematic of the procedure for experiments using U2OS cells and pMFcs.