

## Supporting information

### **Effect of adenosine monophosphate on the visible-light driven nicotinamide mononucleotide reduction with the system of water- soluble zinc porphyrin and colloidal rhodium nanoparticles**

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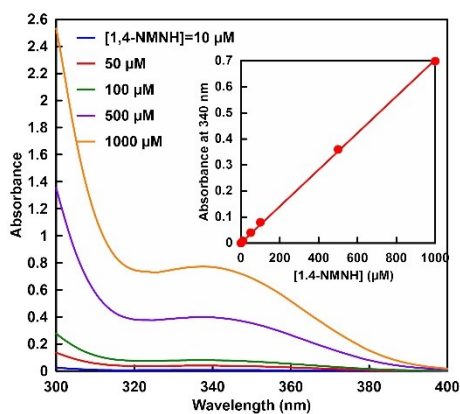
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**1. UV-Vis absorption spectra of various 1,4-NMNH concentrations and the relationship between 1,4-NMNH concentration and absorbance at 340 nm**

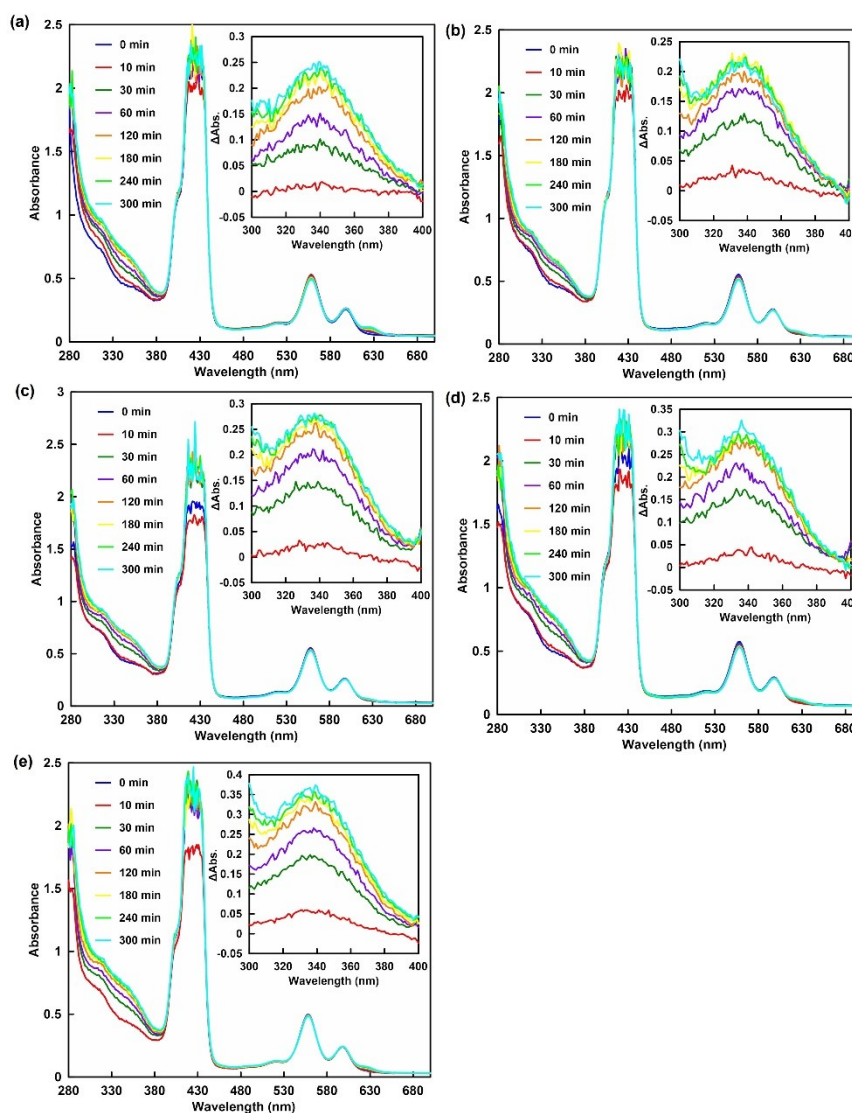
Figure S1 shows UV-Vis absorption spectra of various 1,4-NMNH concentrations. Inset shows the relationship between 1,4-NMNH concentration and absorbance at 340 nm.



**Figure S1.** UV-Vis absorption spectra of various 1,4-NMNH concentrations (10 – 1000 μM). Inset shows the relationship between 1,4-NMNH concentration and absorbance at 340 nm.

## 2. Visible-light driven reduction of $\text{NMN}^+$ in the system of TEOA, ZnTPPS and Rh-PVP in the presence of AMP

Figure S2 shows the time dependence of UV-vis absorption spectra changes in the sample solution consisting of TEOA, ZnTPPS, Rh-PVP and  $\text{NMN}^+$  with the irradiation in the presence of AMP (0 – 2.5 mM). In set shows the different UV-vis absorption spectra changes of sample solution from 0 min irradiation.



**Figure S2.** UV-vis absorption spectra changes in the sample solution consisting of TEOA, ZnTPPS, Rh-PVP and  $\text{NMN}^+$  with the irradiation in the presence of AMP. AMP concentration: 0 (a), 0.5 (b), 1.0 (c), 1.5 (d) and 2.0 mM (e).