Supplementary materials

Spectra of the reaction mixtures demonstrating influence of radical traps on the yield of investigated reaction; spectra illustrating photochemical stability of *O*-thioacyl hydroxylamines.

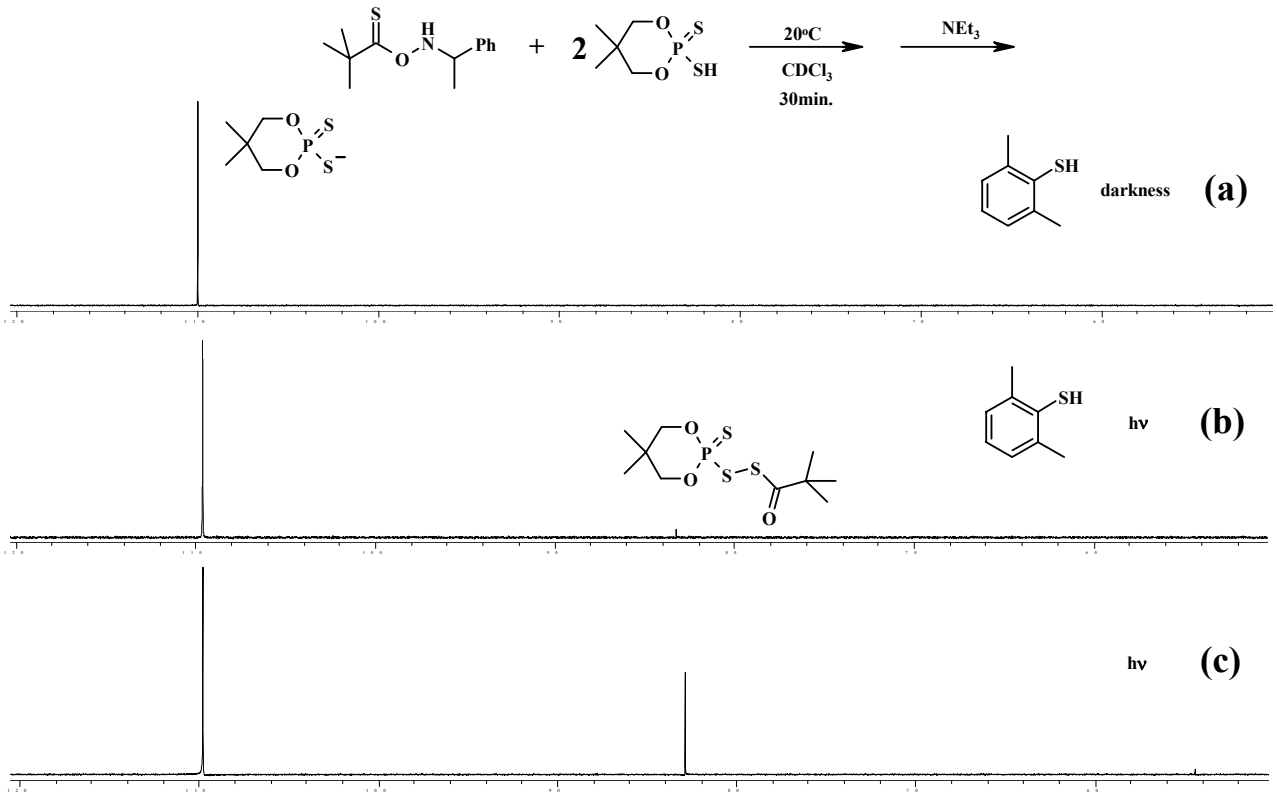

Figure S1. ^{31}P NMR spectra of reaction mixtures formed from *O*-thiopivaloyl *N*-1-phenylethylhydroxylamine **7c** and dithiophosphoric acid **1** in the presence of 1,6-dimethylthiophenole at different experimental conditions.

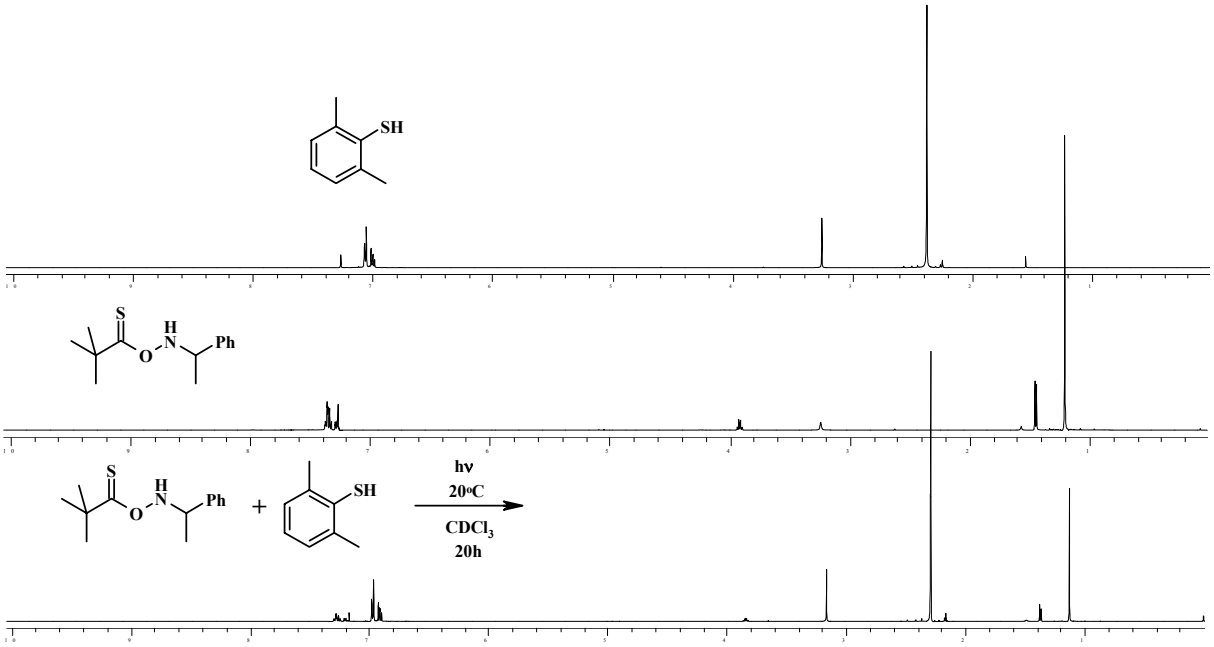

Figure S2. ^{1}H NMR spectrum of the reaction mixture formed after irradiation of *O*-thiopivaloyl *N*-1-phenylethylhydroxylamine **7c** in the presence of thiophenol **14**. Comparison with the starting materials.

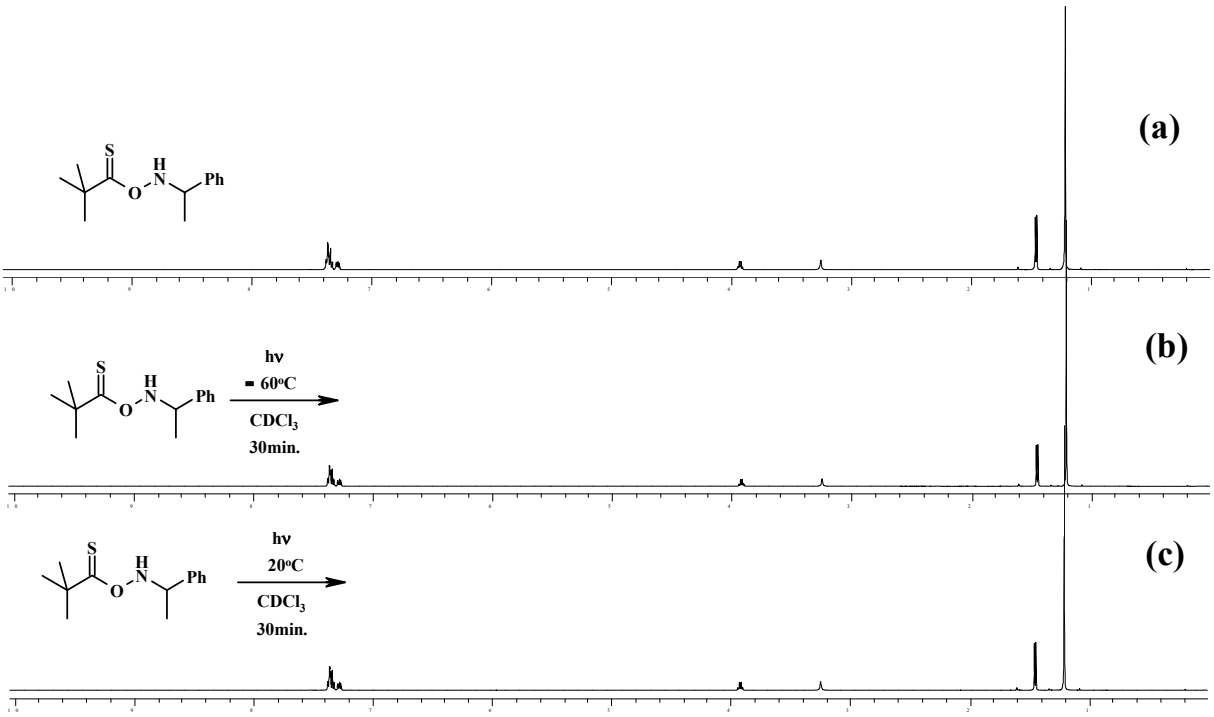

Figure S3. ^{1}H NMR spectra of the reaction mixtures formed after irradiation of *O*-thiopivaloyl *N*-1-phenylethylhydroxylamine **7c**. Comparison with the starting material.