Supplementary material:

Supplementary Figure 1: The preparations of GS-DNIC made by addition of Fe^{2+} (200 µM) to GSH (20 mM)/GSNO (400 µM) and incubated 20 min. in pH 7 were checked for stability in 1 h and 2 h at room temperature in a quartz tube in the air in the dark. No visible deterioration of M-DNIC concentration was found. EPR: 1 scan at 77 K, microwave power 1 mW, microwave frequency 9.5 GHz and modulation amplitude 0.3 mT.
Supplementary Figure 2: The preparations of GS-DNIC made by addition of Fe$^{2+}$ (200 µM) to GSH (20 mM)/GSNO (400 µM) and incubated 20 min. in pH 6 were checked for stability in 1 h and 2 h at room temperature in a quartz tube in the air in the dark. We observed ca 10% decrease of M-DNIC concentration. EPR: 1 scan at 77 K, microwave power 1 mW, microwave frequency 9.5 GHz and modulation amplitude 0.3 mT.
Supplementary Figure 3: The preparations of GS-DNIC made by addition of Fe$^{2+}$ (1 μM) to GSH (7 mM)/GSNO (700 μM) and incubated 20 min. in pH 7 were checked by EPR for stability in 1 h and 2 h at room temperature in a quartz tube in the air in the dark. No visible deterioration of M-DNIC concentration was found. EPR: 8 scans at 77 K, microwave power 1 mW, microwave frequency 9.5 GHz and modulation amplitude 0.3 mT.
Supplementary Figure 4: The preparations of GS-DNIC made by addition of Fe$^{2+}$ (1 µM) to GSH (7 mM)/GSNO (700 µM) and incubated 20 min. in pH 6 were checked for stability in 1 h and 2 h at room temperature in a quartz tube in the air in the dark (A). We observed ca 60% decrease of M-DNIC concentration after 2 h (B). EPR: 8 scans at 77 K, microwave power 1 mW, microwave frequency 9.5 GHz and modulation amplitude 0.3 mT.