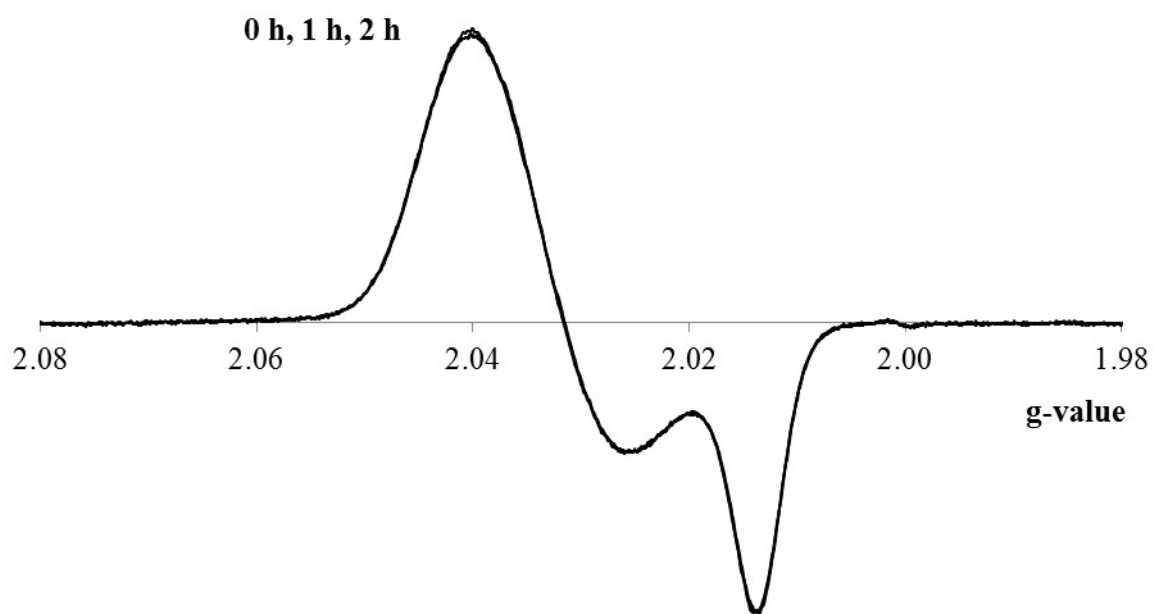
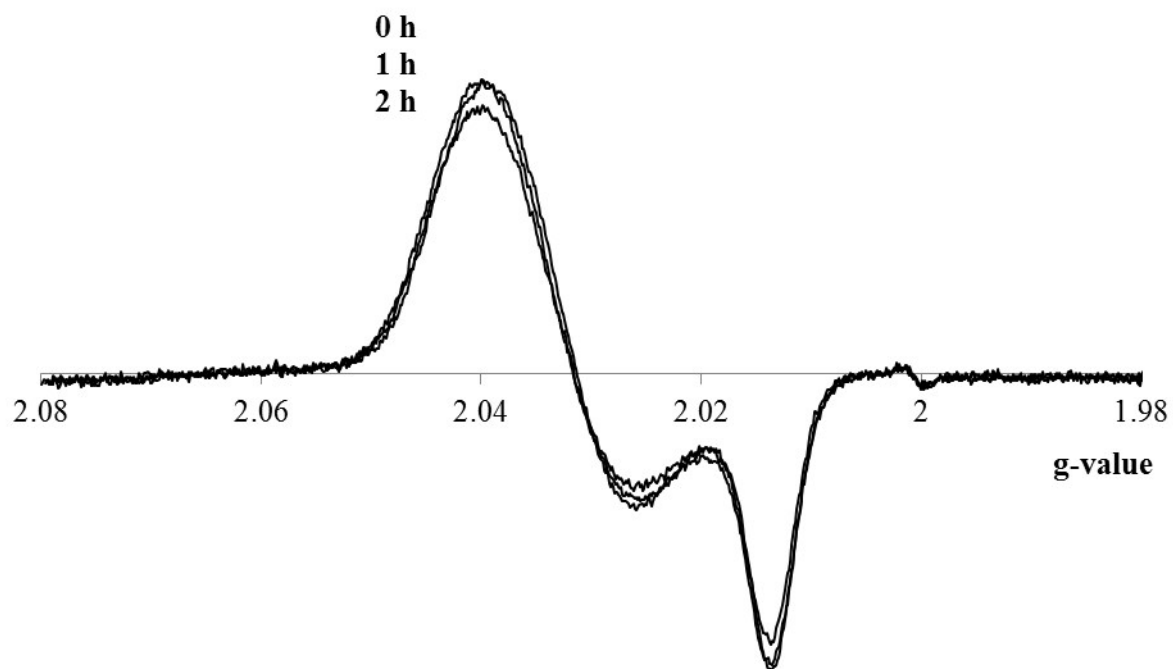


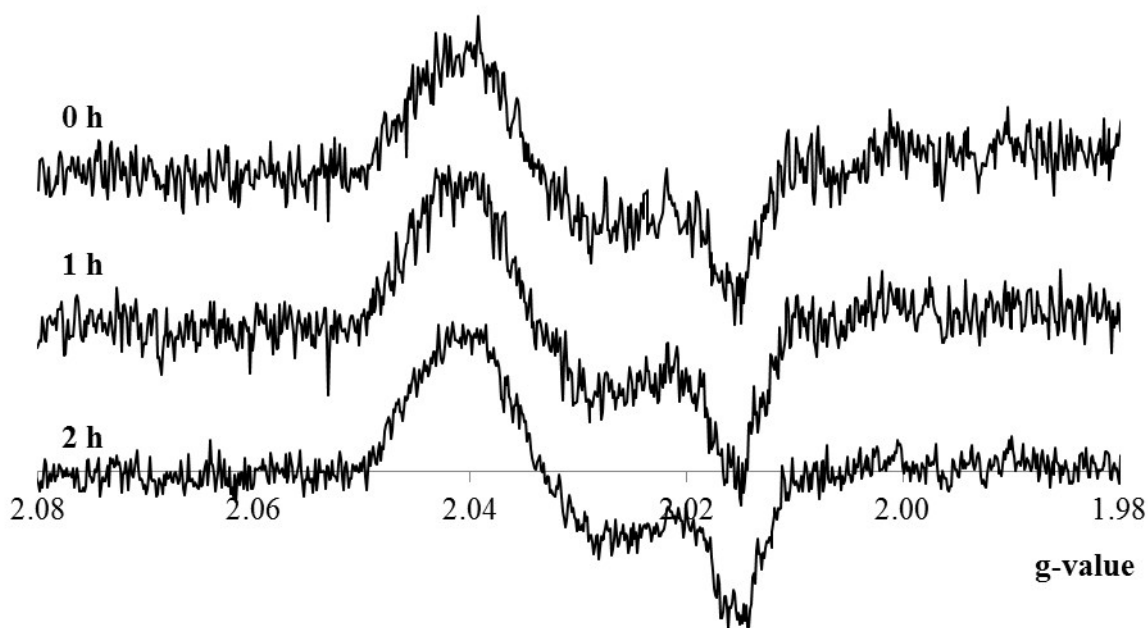
Supplementary material:



Supplementary Figure 1: The preparations of GS-DNIC made by addition of  $\text{Fe}^{2+}$  ( $200 \mu\text{M}$ ) to GSH ( $20 \text{ mM}$ )/GSNO ( $400 \mu\text{M}$ ) 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.

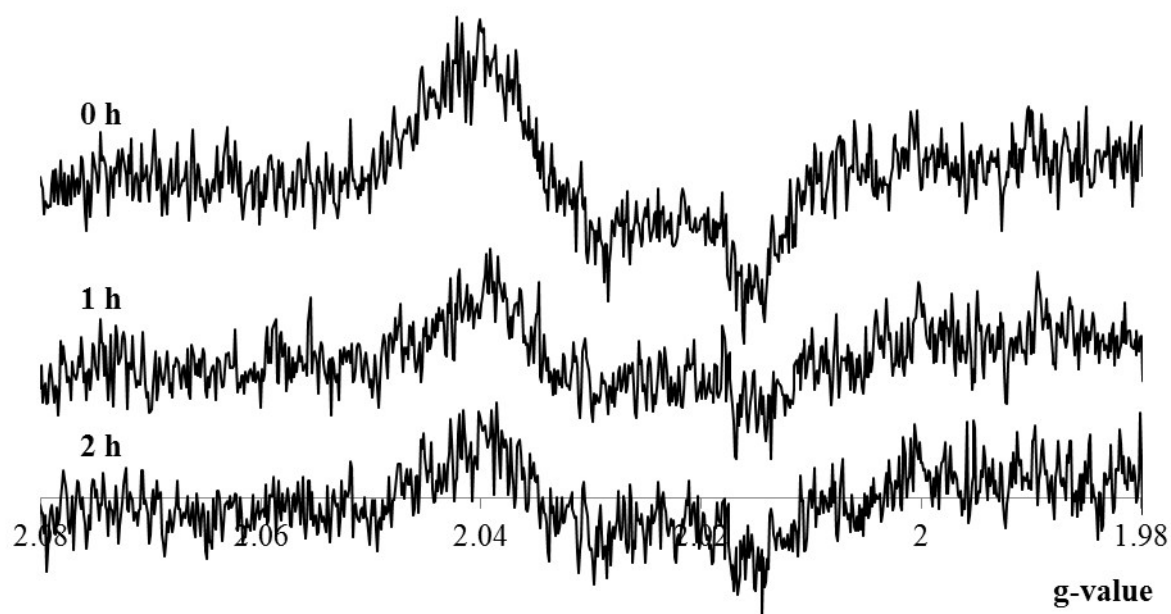


Supplementary Figure 2: The preparations of GS-DNIC made by addition of  $\text{Fe}^{2+}$  ( $200 \mu\text{M}$ ) to GSH ( $20 \text{ mM}$ )/GSNO ( $400 \mu\text{M}$ ) and incubated 20 min. in pH 6 were checked for stability in 1 h and 2 h at room temperature in a quartz tube in the air in the dark. We 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.

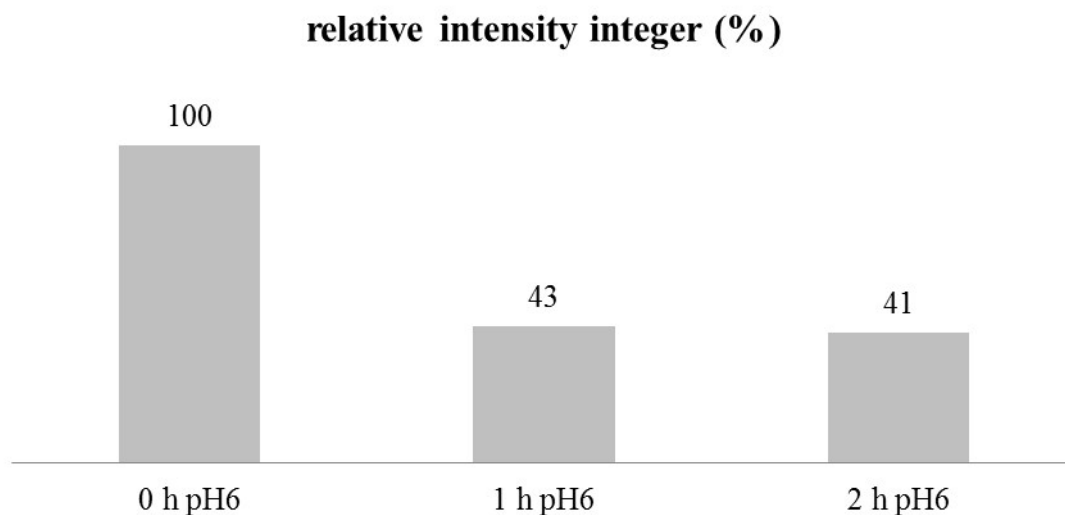


Supplementary Figure 3: The preparations of GS-DNIC made by addition of  $\text{Fe}^{2+}$  ( $1 \mu\text{M}$ ) to GSH ( $7 \text{ mM}$ )/GSNO ( $700 \mu\text{M}$ ) and incubated 20 min. in pH 7 were checked by EPR for stability in 1 h and 2 h at room temperature in a quartz tube in the air in the dark. 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.

A



B



Supplementary Figure 4: The preparations of GS-DNIC made by addition of  $\text{Fe}^{2+}$  ( $1 \mu\text{M}$ ) to GSH ( $7 \text{ mM}$ )/GSNO ( $700 \mu\text{M}$ ) 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.