

SUPPLEMENTARY FIG. S2. GPx7 cannot be oxidized by the GSSG/GSH redox buffer.  $20\,\mu M$  GPx7 proteins were incubated with or without reduced/oxidized glutathione (GSH/GSSG) redox buffer (1/0.2 mM) for indicated time points. Free thiols were then blocked by adding nonreducing (NR) 2×SDS-loading buffer containing  $10\,\mathrm{m}M$  methoxy polyethylene glycol 5000 maleimide (mPEG-mal) (lanes 3–5) and resolved by SDS-15% PAGE and Coomassie staining. After alkylation by mPEG-mal, the mobility of GPx7 was significantly slowed down, and GSH/GSSG showed no effect on the redox states of GPx7.