



## Supplementary Figure S4.

Total levels of cysteine, glutathione, taurine intermediates and glutamate in healthy mouse tissues (related to Fig. 3). **A-G**, Healthy C57BL6J mice were infused with  $^{13}$ C<sub>6</sub>-cystine for 4 hours, followed by analysis of the total signal of **A** cystine, **B**  $\gamma$ -glutamylcysteine, **C** cysteine, **D** glutathione, **E** hypotaurine, **F** taurine, and **G** glutamate in the serum and nine different tissues (liver, pancreas, kidney, heart, thymus, spleen, lung, cerebellum, and brain). Data are presented as mean  $\pm$  SD and N=5 mice. The total signal is the sum of all isotopologue signals. The peak intensities of isotopologues were measured as AreaTop (mean of three top points in the peak). N.D., not detected. (Cys)<sub>2</sub>, cystine; Cys, cysteine;  $\gamma$ -Glu-Cys,  $\gamma$ -glutamylcysteine; GSH, glutathione; Htau, hypotaurine; Tau, taurine; Glut, glutamate.