

The Regulation of ZIP8 by Dietary Manganese in Mice

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Supplemental Figures

(Uncropped Western Blot Images for Figures S1–S7 and Figure S8)

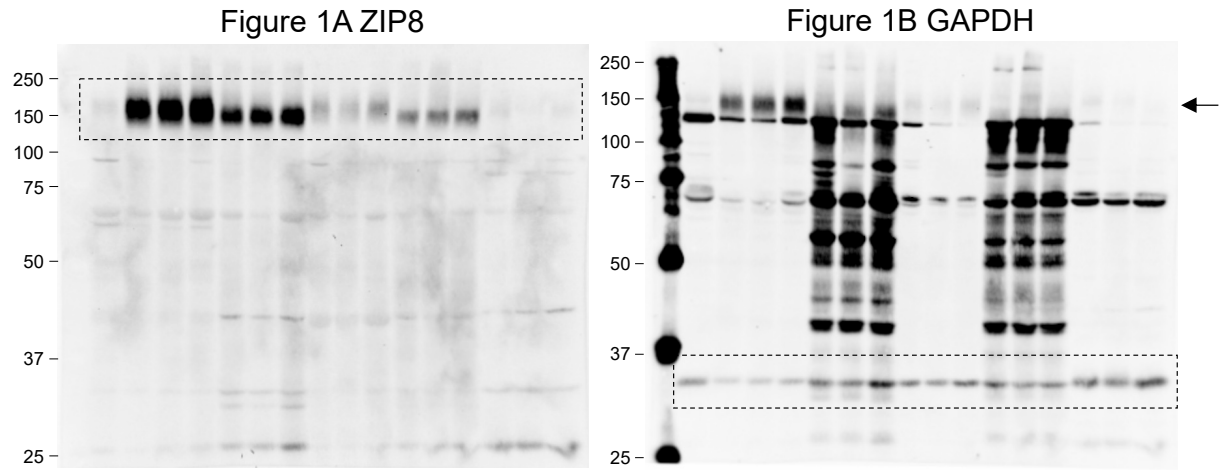


Figure S1. Uncropped Western Blot Images for Figure 1. Black arrow in the GAPDH blot indicates the unstripped signal from the anti-mZIP8 antibody. The band below 37 kDa represents the signal for GAPDH. The Precision Protein StrepTactin-HRP conjugate (Bio-Rad, #1610380) was used to detect the protein standards (Bio-Rad, #1610376) as the molecular weight markers (the lane on the very left). The StrepTactin-HRP also recognizes several non-specific bands in mouse tissue samples. Each lane was loaded with 120 μ g of protein.

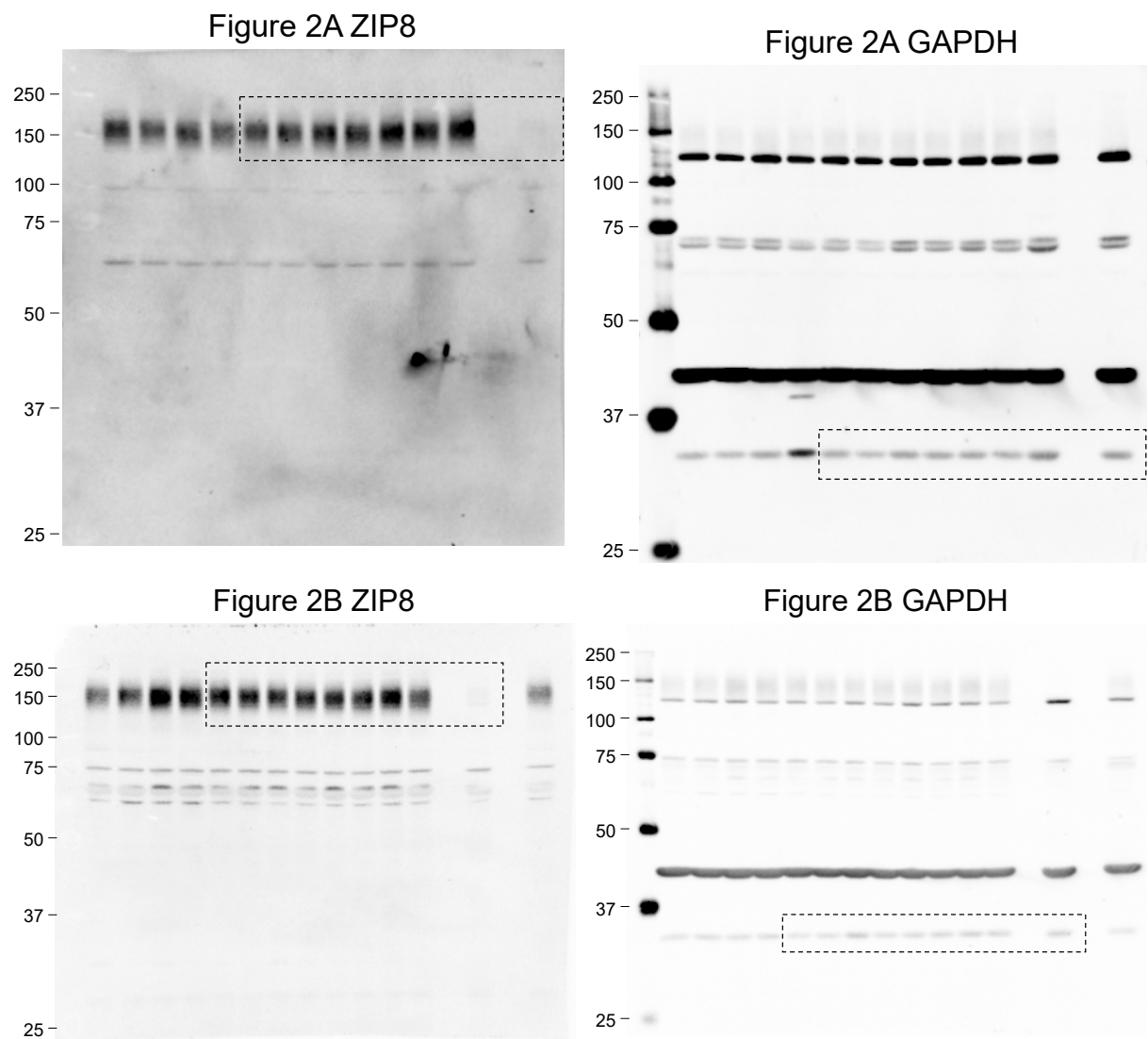


Figure S2. Uncropped Western Blot Images for Figure 2. Each lane was loaded with 50 μ g of protein for Figure 2A and 102 μ g of protein for Figure 2B.

Figure 3A ZIP8

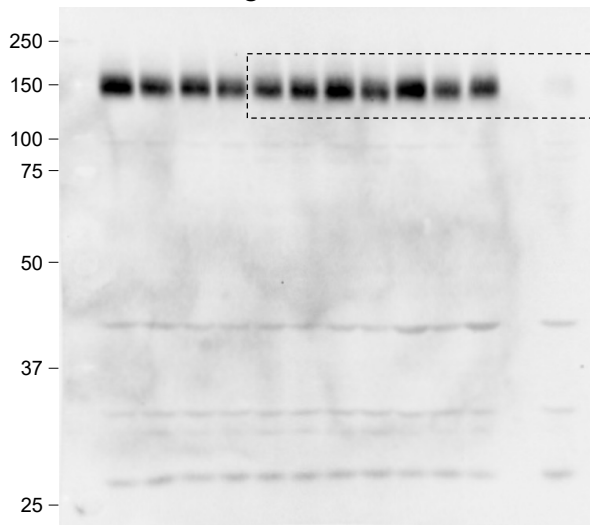


Figure 3A GAPDH

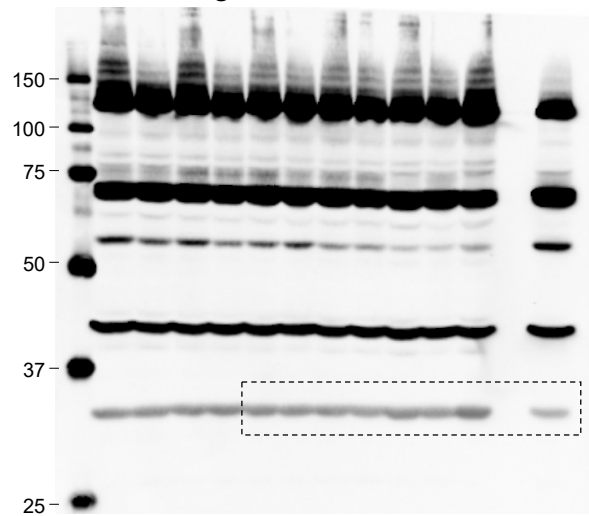


Figure 3B ZIP8

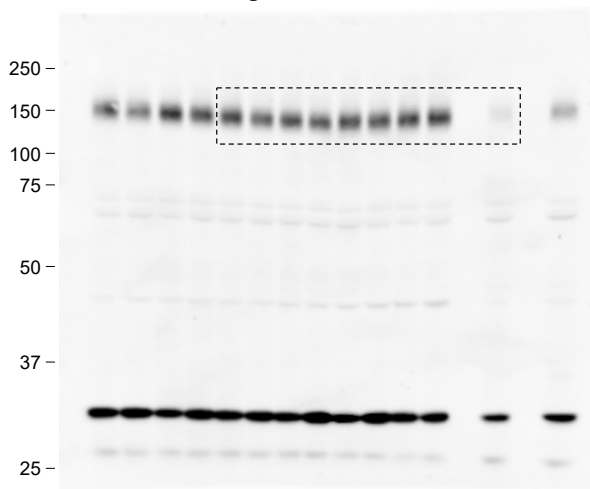


Figure 3B GAPDH

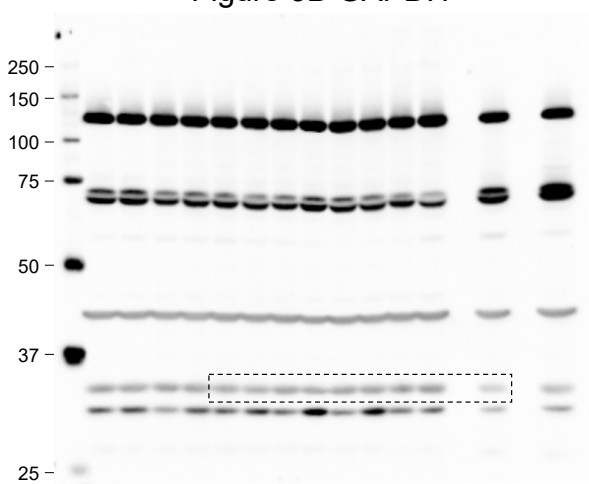


Figure S3. Uncropped Western Blot Images for Figure 3. Each lane was loaded with 159 μ g of protein.

Figure 4A ZIP8

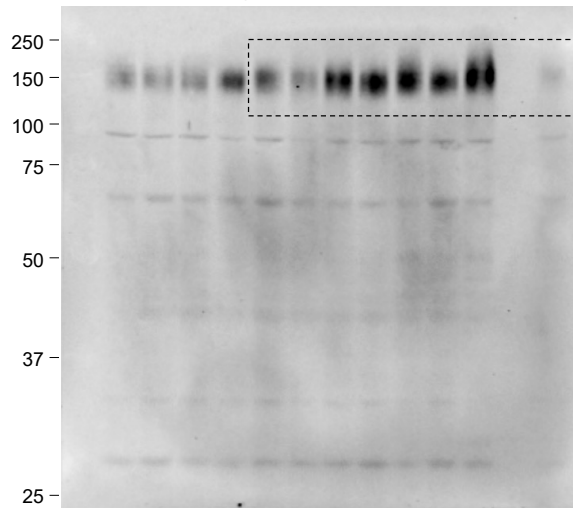


Figure 4A GAPDH

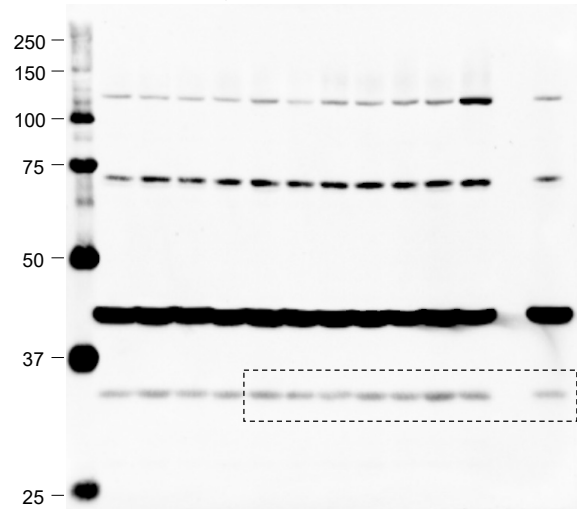


Figure 4B ZIP8

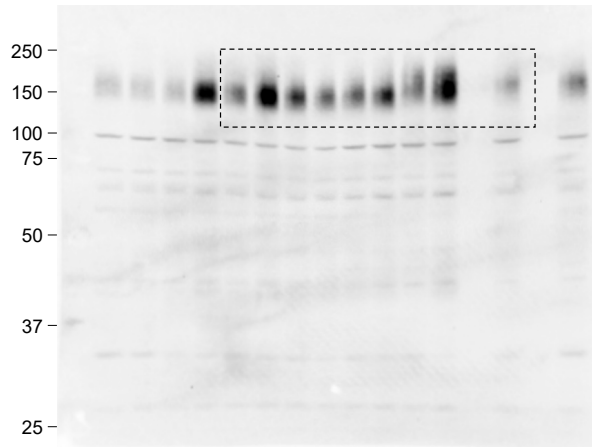


Figure 4B GAPDH

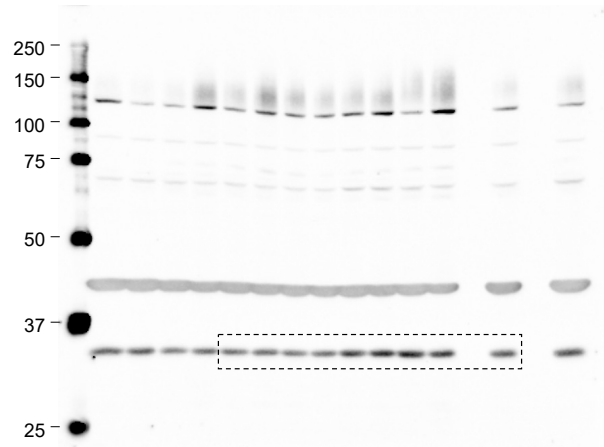


Figure S4. Uncropped Western Blot Images for Figure 4. Each lane was loaded with 124 μ g of protein.

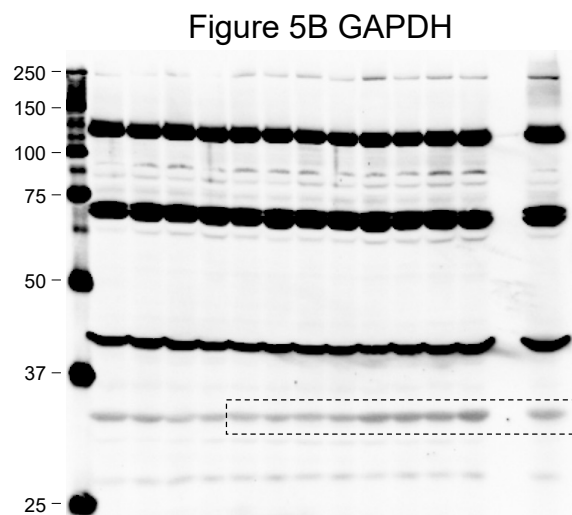
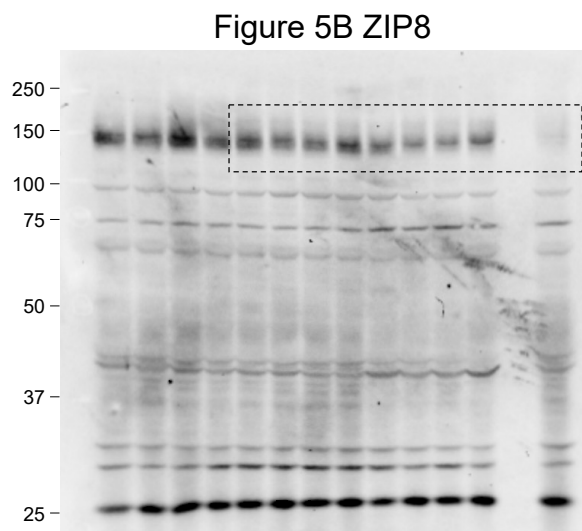
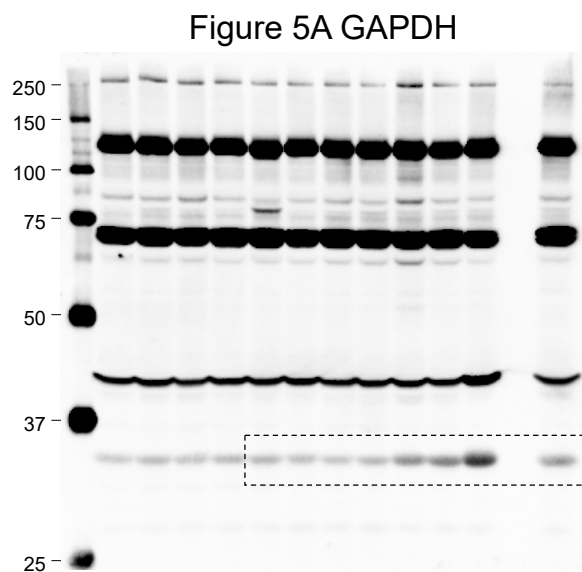
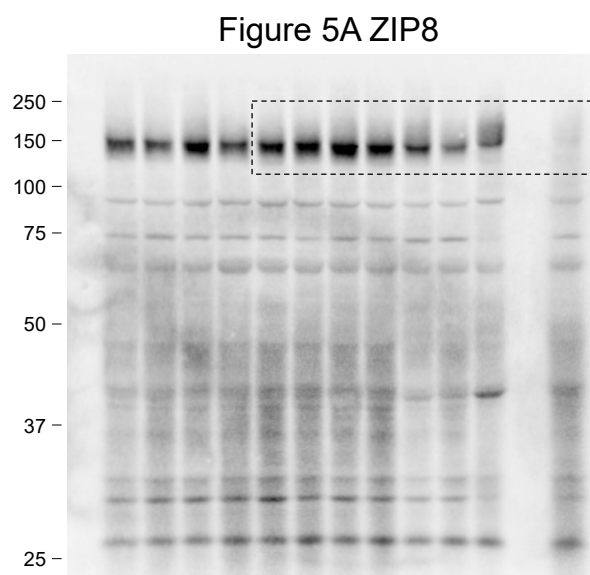


Figure S5. Uncropped Western Blot Images for Figure 5. Each lane was loaded with 213 μ g of protein for Figure 5A and 240 μ g of protein for Figure 5B.

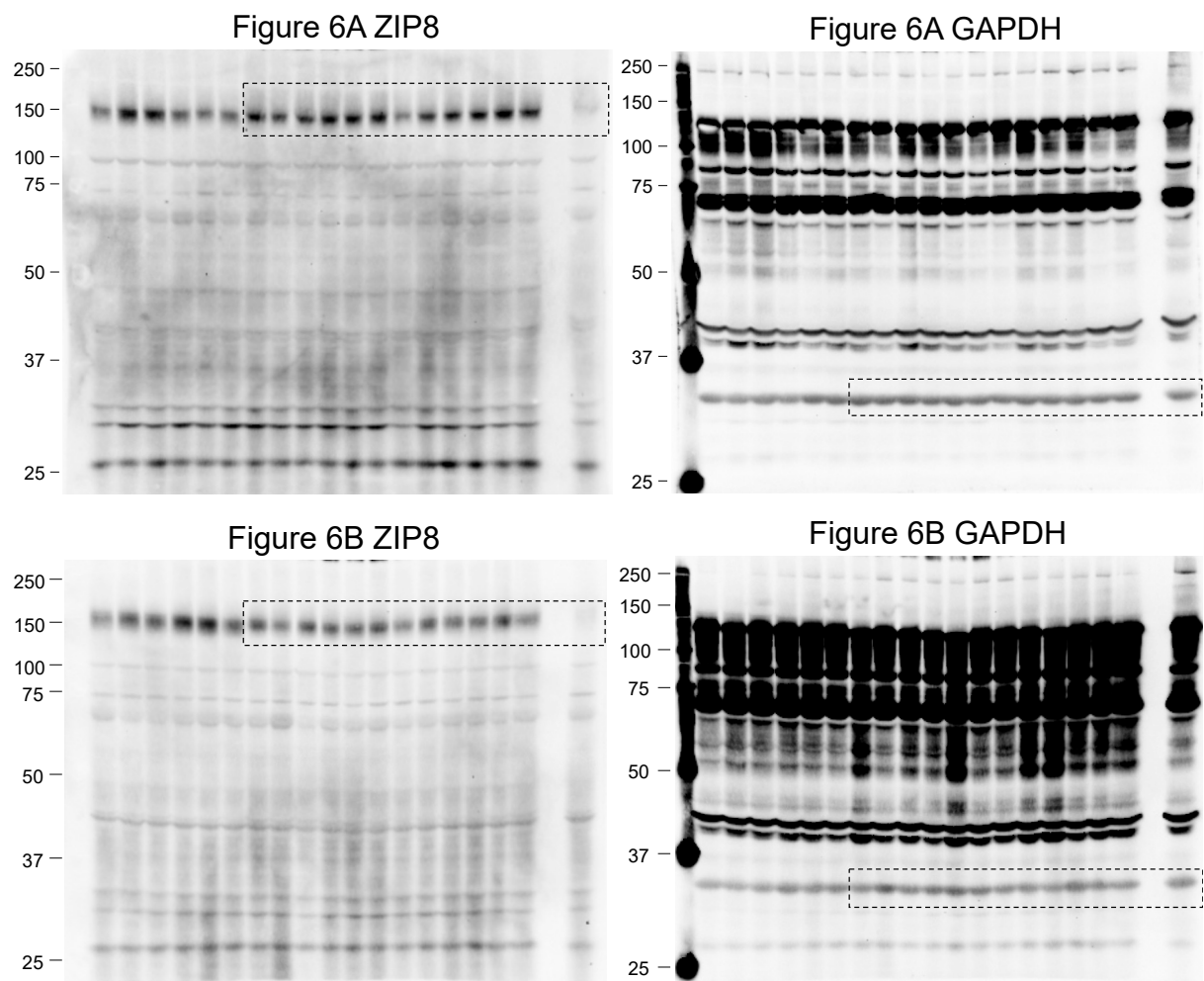


Figure S6. Uncropped Western Blot Images for Figure 6. Each lane was loaded with 222 μ g of protein for Figure 6A and 220 μ g of protein for Figure 6B.

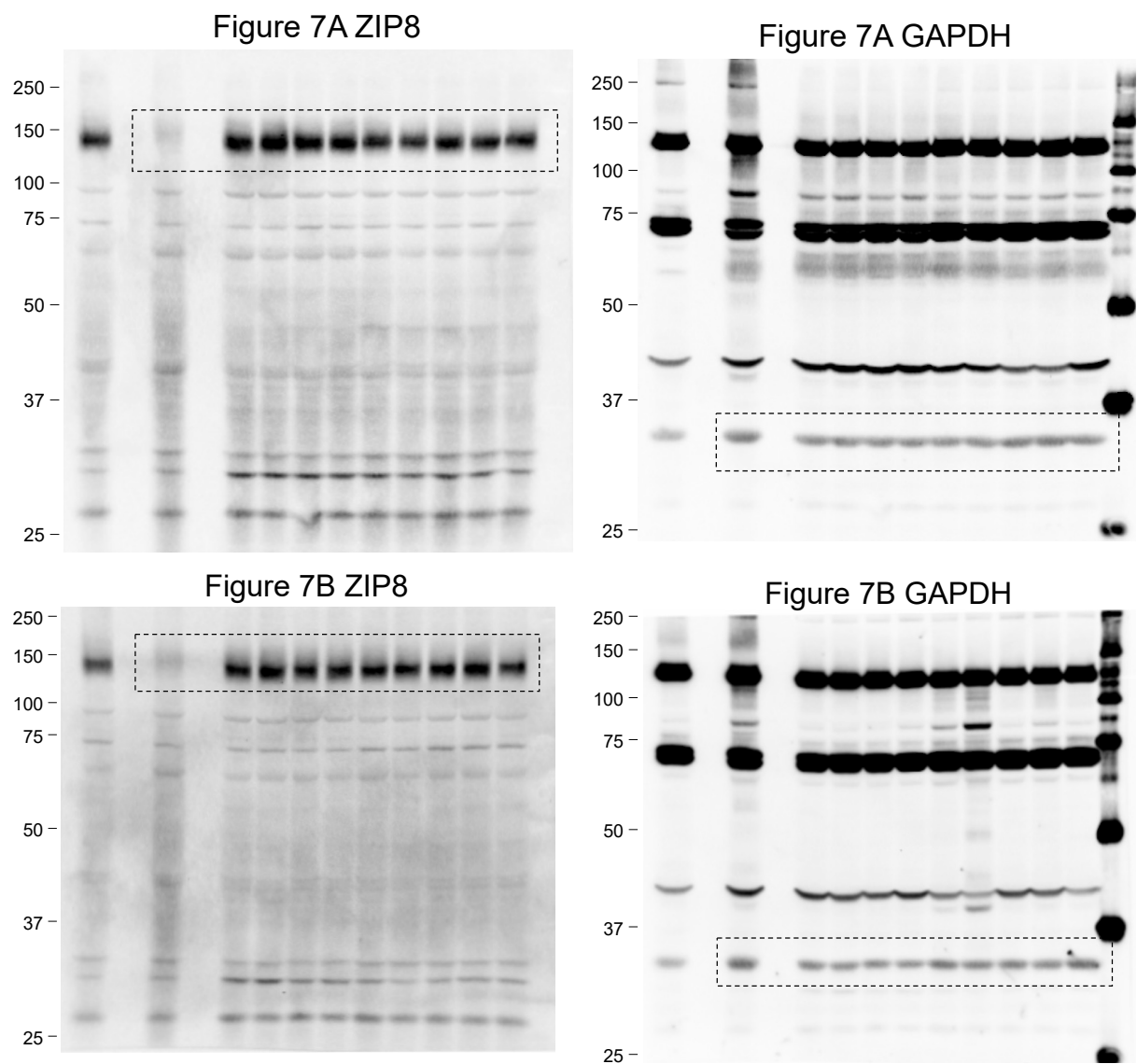


Figure S7. Uncropped Western Blot Images for Figure 7. Each lane was loaded with 200 μ g of protein.

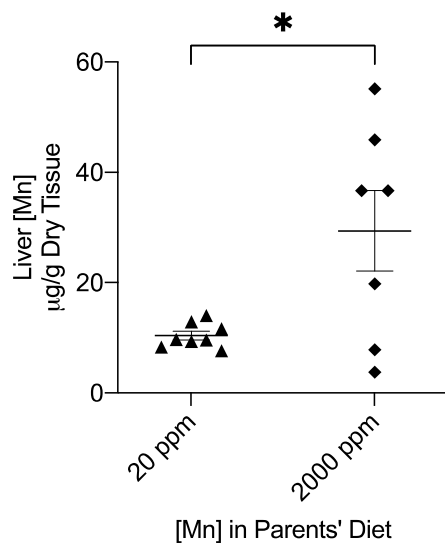


Figure S8. Liver manganese levels in mice that were born from and fed by mothers on 20 ppm manganese and 2000 ppm manganese diets. Manganese contents were measured by inductively coupled plasma mass spectrometry at 3 weeks of age ($n = 7-8$ /group: 4 male and 4 female for the 20 ppm group; 3 male and 4 female for the 2000 ppm group). On average, the liver manganese content in mice with high manganese intake is about 3 times as high as the value from the control mice. Statistical analysis was performed using unpaired t -test with Welch's correction for unequal variances. Data are expressed as mean \pm SEM. * $p < 0.05$.