SUPPLEMENTARY DATA

Aging-Induced Brain-Derived Neurotrophic Factor in Adipocyte Progenitors Contributes to Adipose Tissue Dysfunction

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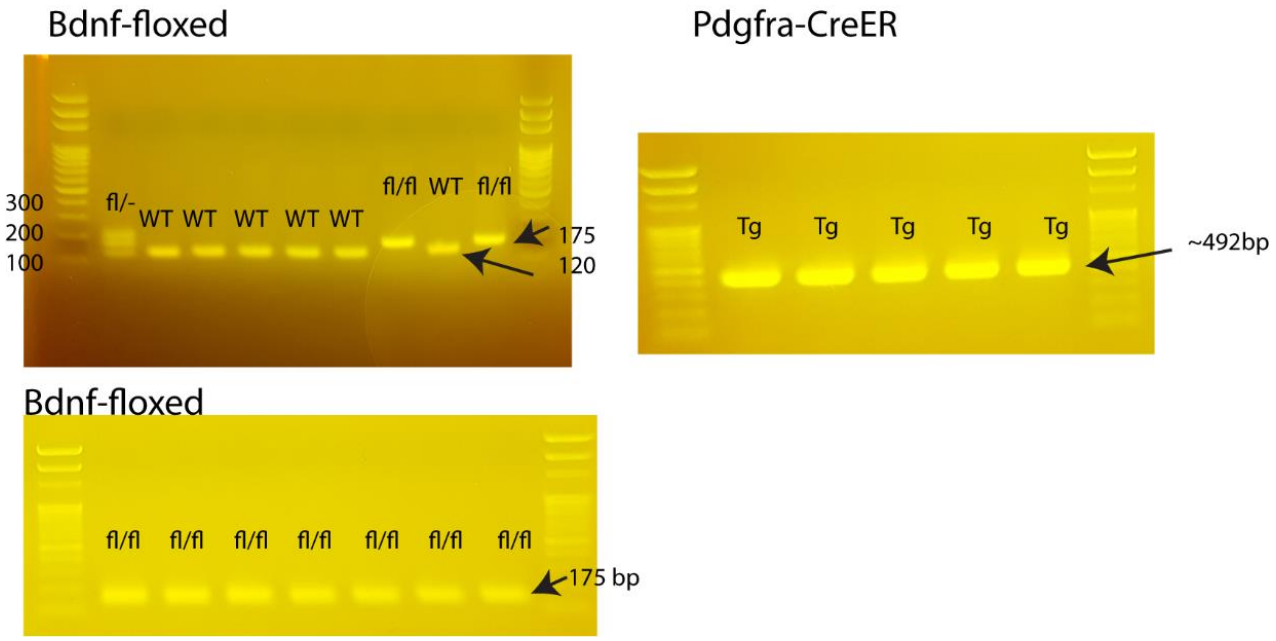

Supplementary Figure 1. Genotyping of BDNF floxed mice and Pdgfra_CreERT2 mice.

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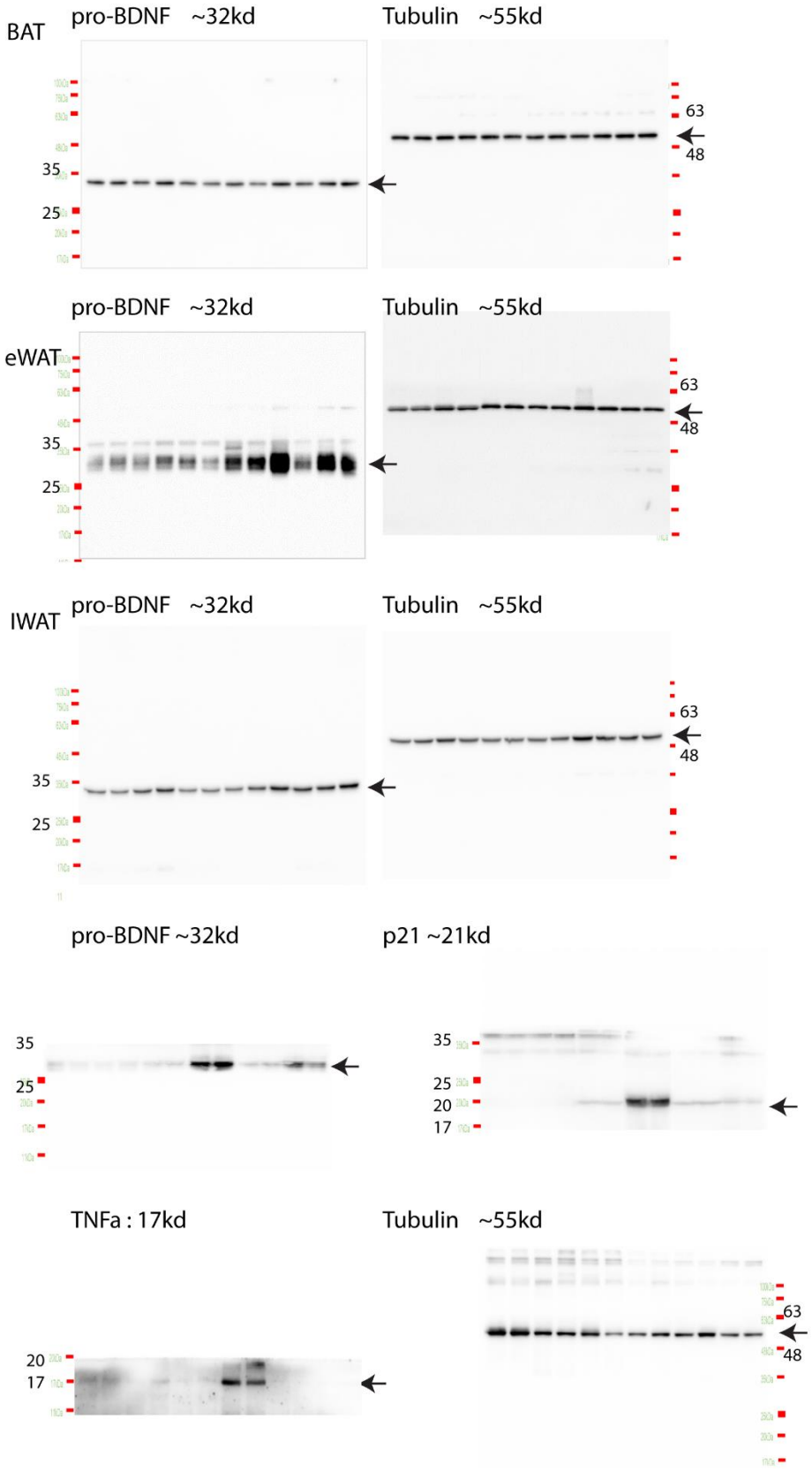

Supplementary Figure 2. Membrane images of western blot analyses used for Figure 1.

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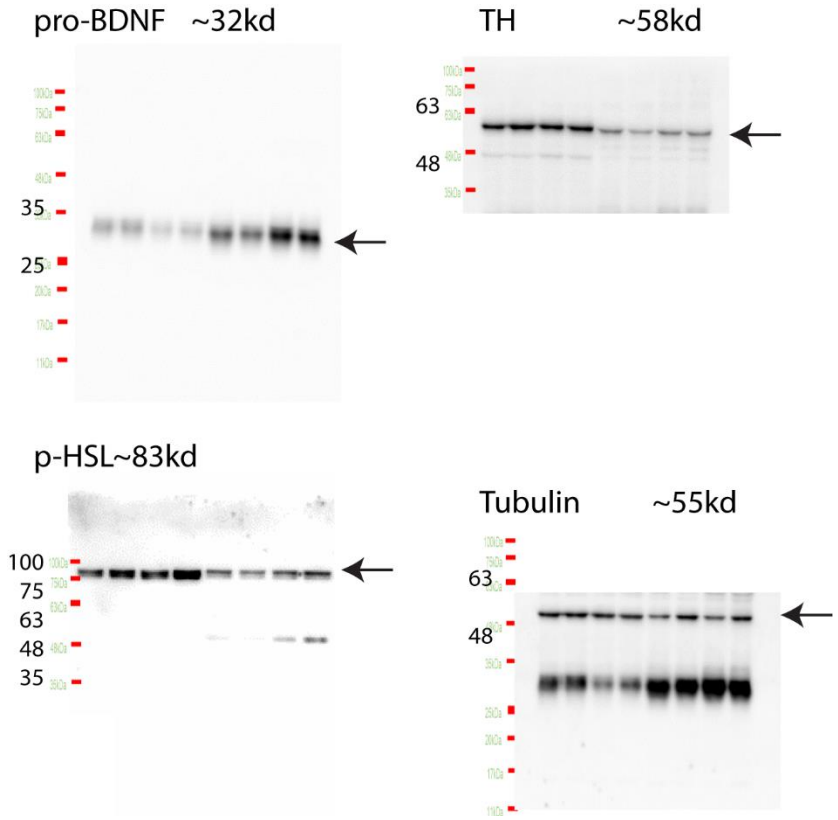
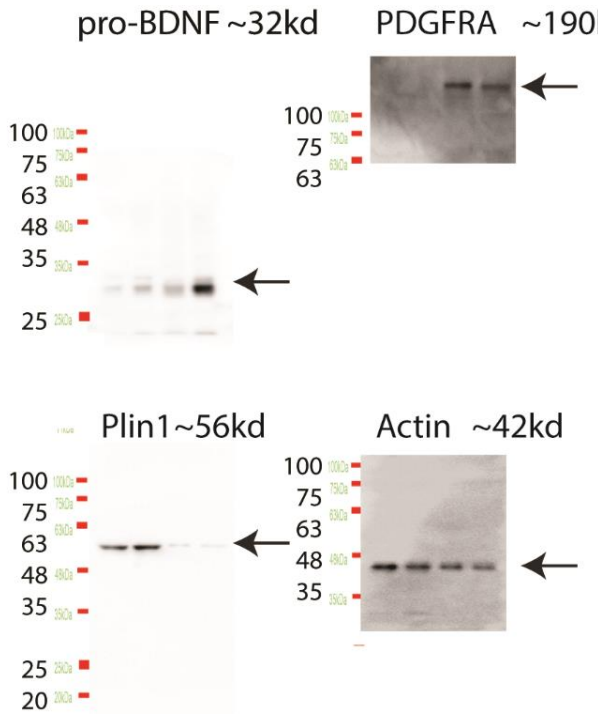


Supplementary Figure 3. Membrane images of western blot analyses used for Figure 2.



Supplementary Figure 4. Membrane images of western blot analyses used for Figure 3 and 4.

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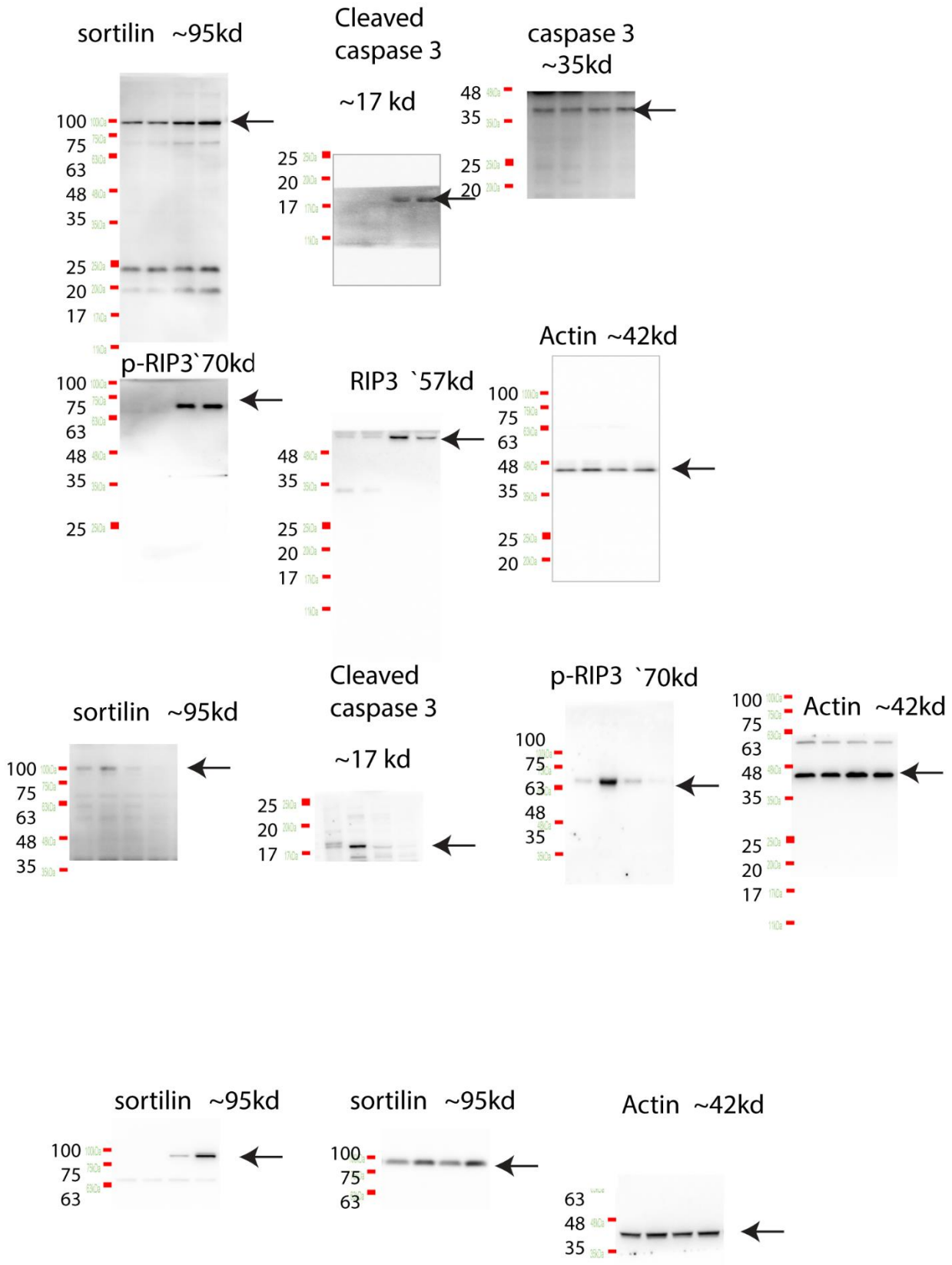

Supplementary Figure 5. Membrane images of western blot analyses used for Figure 5.

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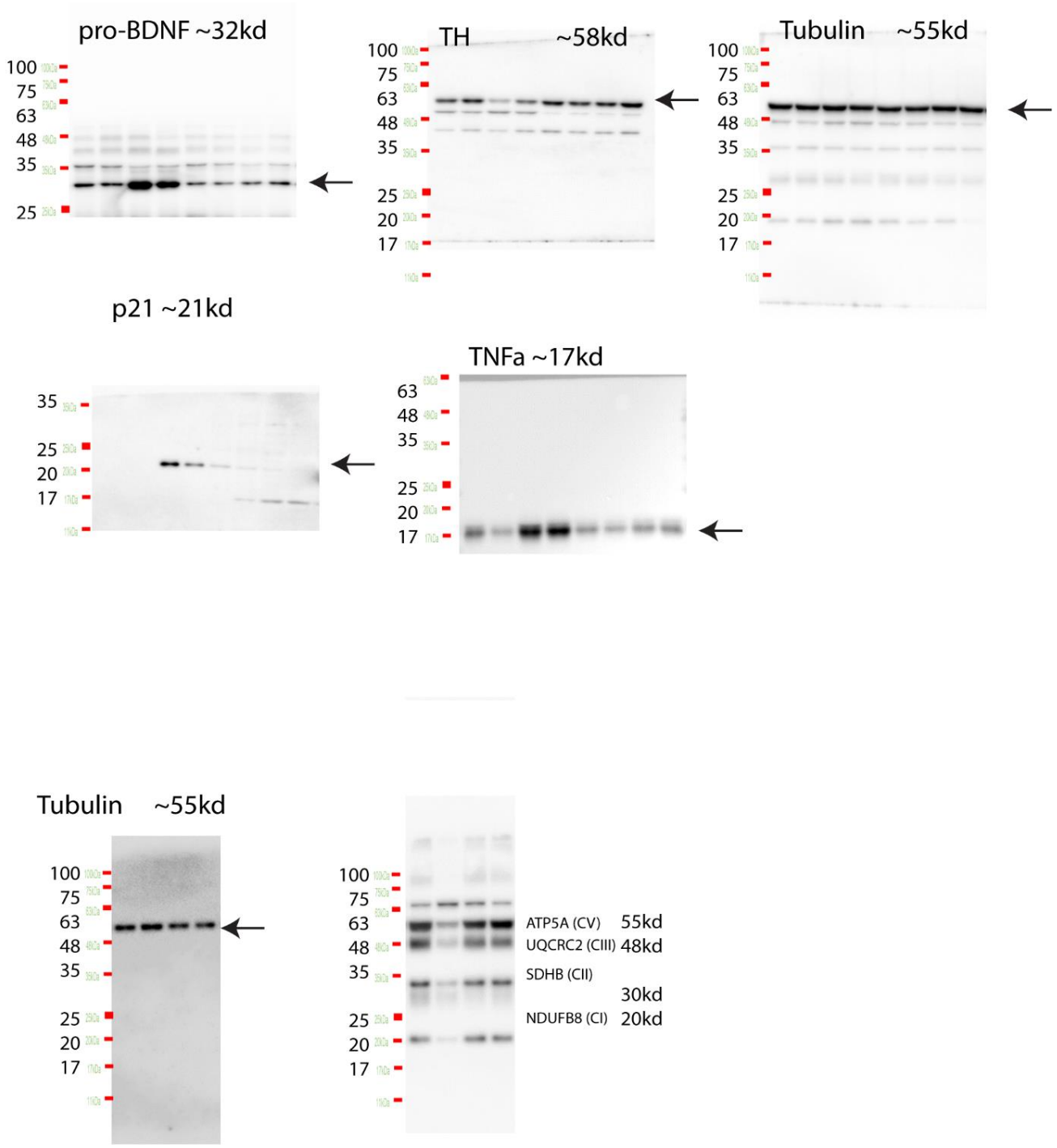

Supplementary Figure 6. Membrane images of western blot analyses used for Figure 6.

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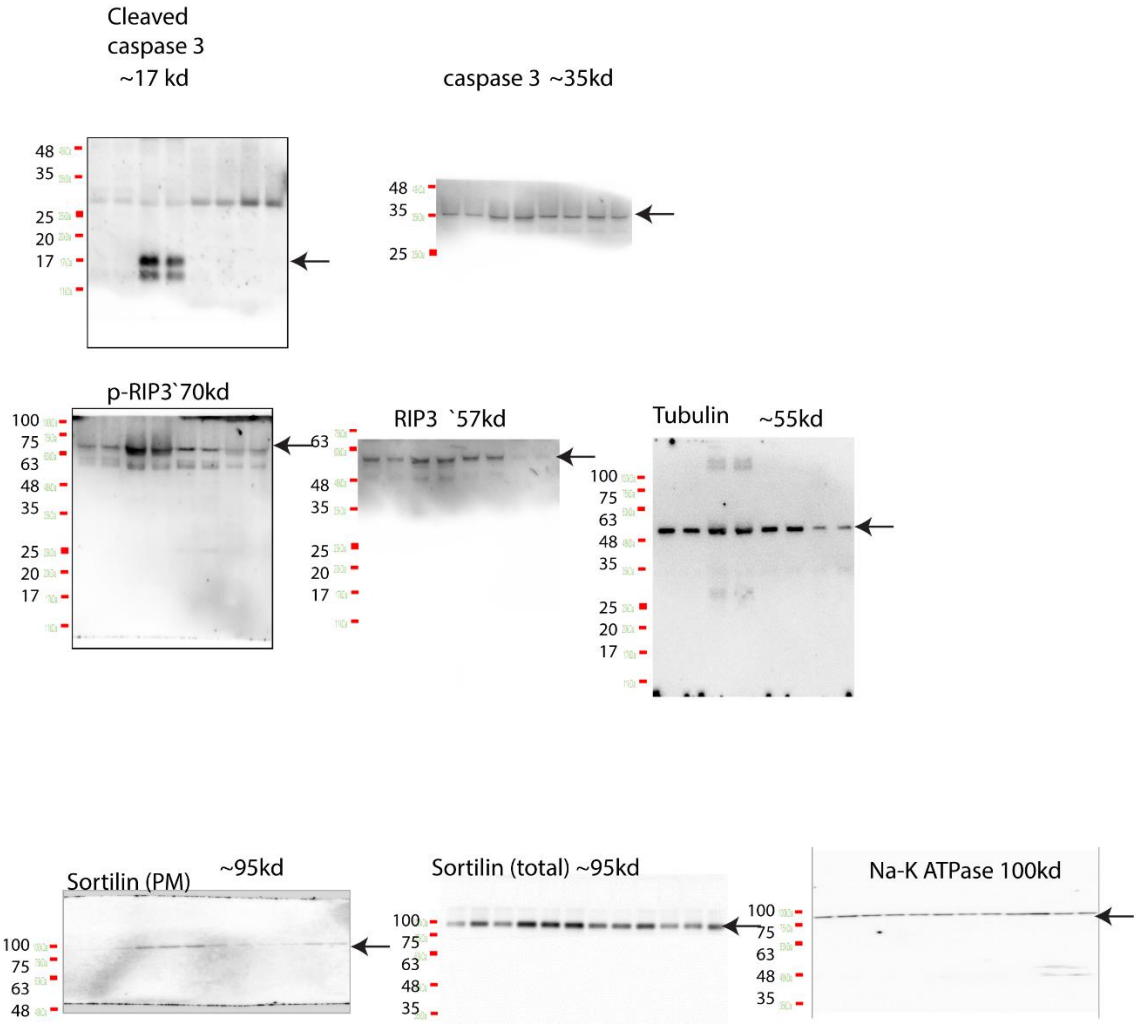
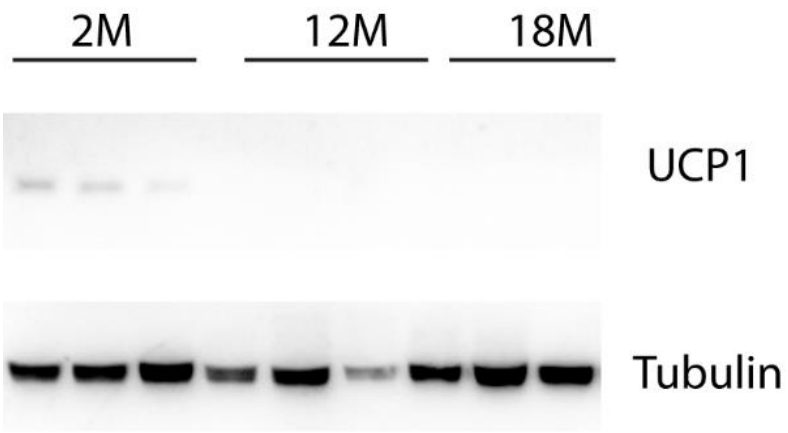
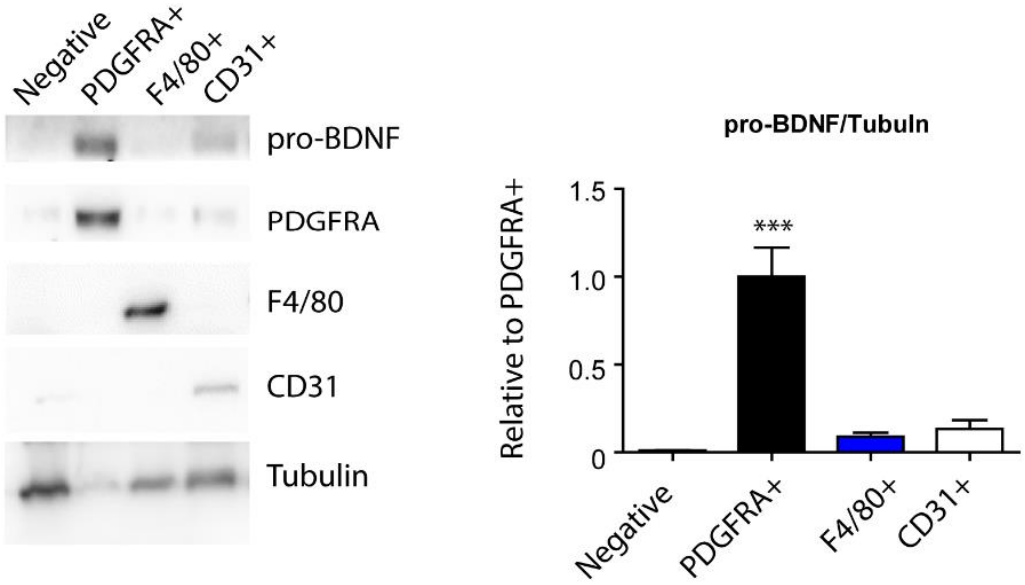


Supplementary Figure 7. Membrane images of western blot analyses used for Figure 7.

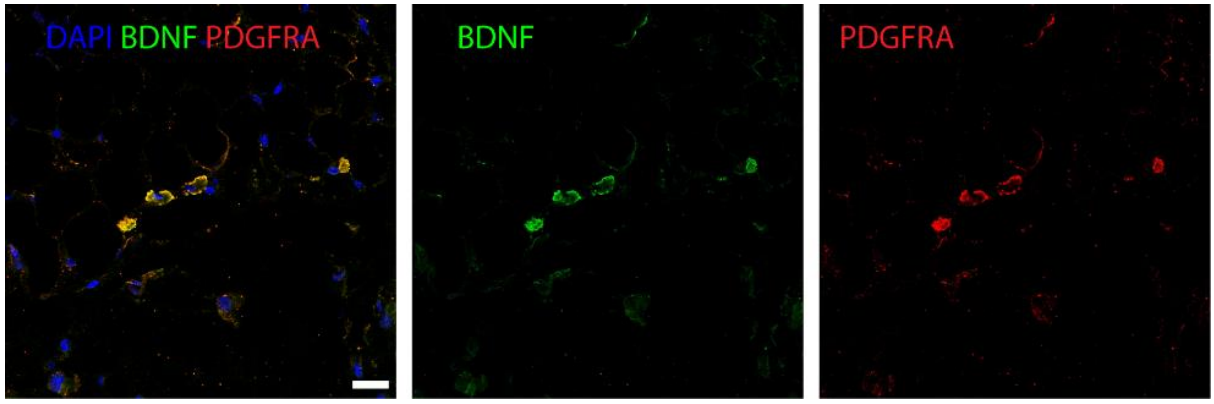


Supplementary Figure 8. Immunoblot analysis of UCP1 expression in eWAT of mice.

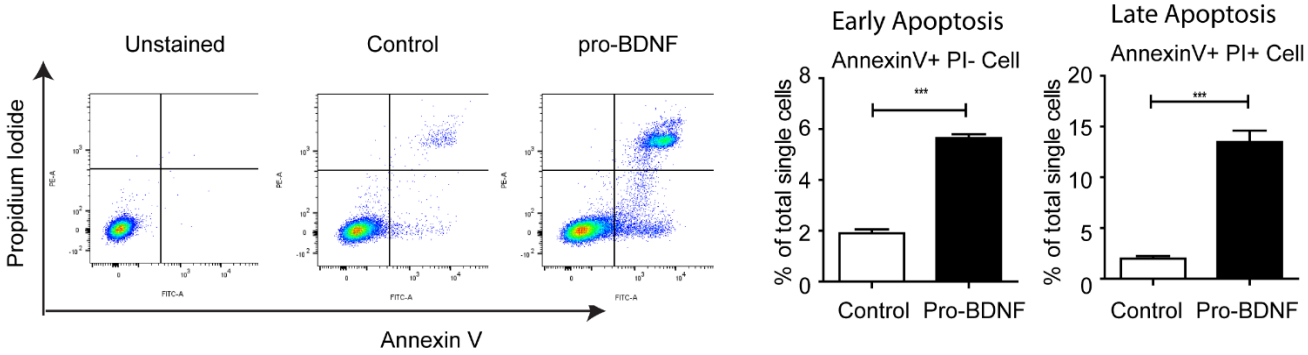
SUPPLEMENTARY DATA



Supplementary Figure 9. Immunoblot analysis of pro-BDNF expression in stormovascular fractions of eWAT of 18-month-old WT mice. (n=3, t-test (comparison to levels in F4/80+ cells), ***p<0.001, Negative: F4/80-, CD31-, PDGFRA- stromovascular fraction).

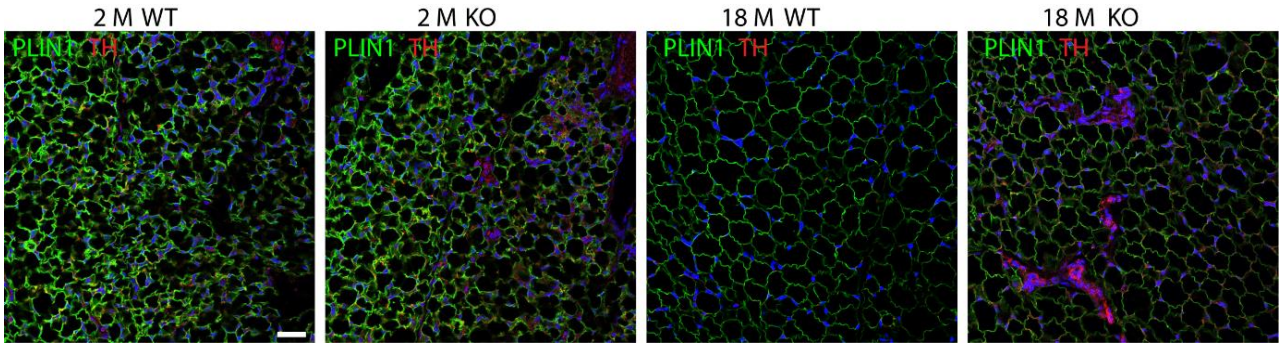


Supplementary Figure 10. Representative images of BDNF and PDGFRA+ expression in paraffin sections of eWAT of 18-month-old mice. Nuclei were counterstained with DAPI. Size bar = 20μm.

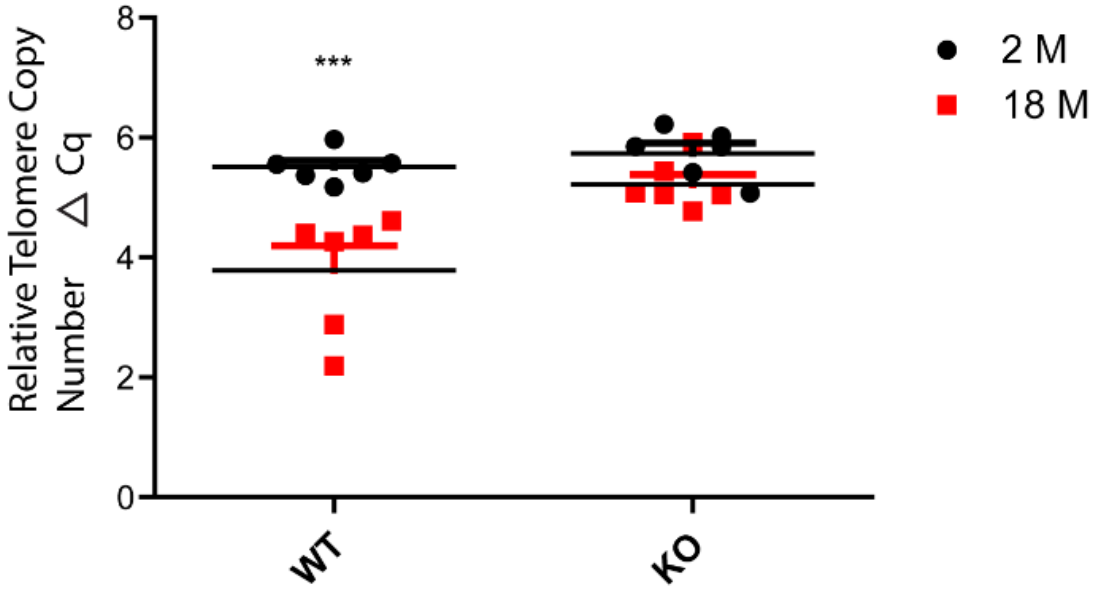


Supplementary Figure 11. Flow cytometric analysis of Annexin V/PI-stained, apoptotic cells after 24hrs of pro-BDNF treatment (10ng/ml) (n = 3, t-test, ***p<0.001).

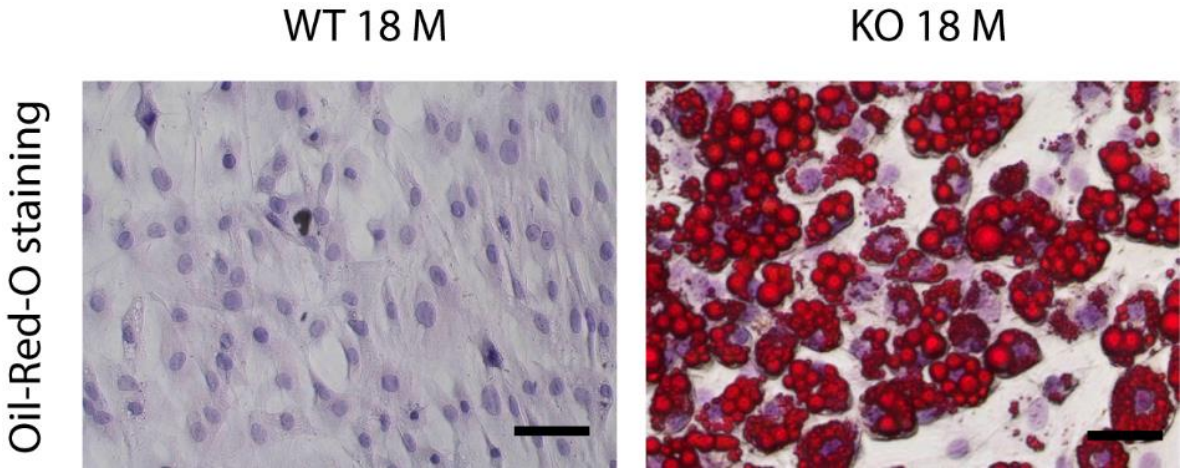
SUPPLEMENTARY DATA



Supplementary Figure 12. Representative images of double staining for tyrosine hydroxylase (TH) and perilipin (PLIN1) in paraffin sections of eWAT of BDNF^{Pdgfra}KO and WT mice. Nuclei were counterstained with DAPI (Size bar = 100μm).

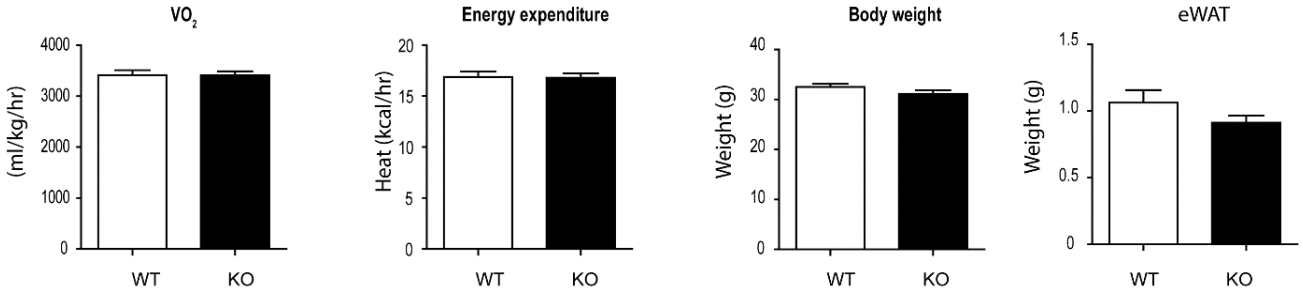


Supplementary Figure 13. Comparison of relative telomere copy number in eWAT between 2-month- and 18- month-old mice of BDNF^{Pdgfra}KO mice and WT controls. (n = 6, t-test, ***p<0.001). *36B4* was used for a single copy gene control.

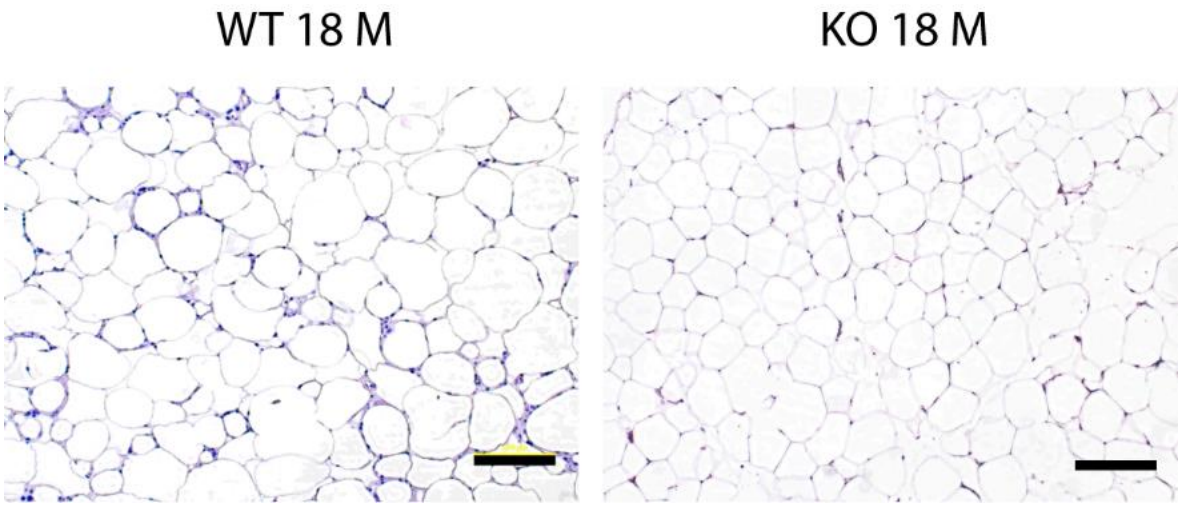


Supplementary Figure 14. Oil Red O staining of differentiated progenitor cells obtained from eWAT of BDNF^{Pdgfra} KO mice and WT control mice (size bars = 25μm). Hematoxylin and eosin were used for counterstain.

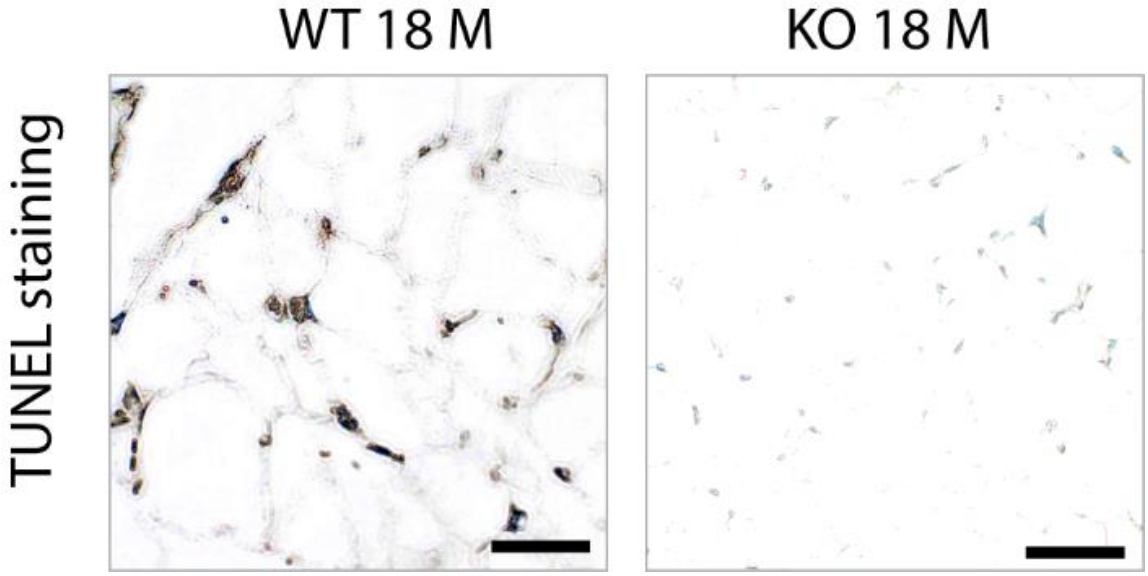
SUPPLEMENTARY DATA



Supplementary Figure 15. Indirect calorimetry analysis, body weight and eWAT mass of 18-month-old BDNF^{Pdgfra} KO mice and WT control mice. There was no statistical difference between KO and WT mice. (p = 0.968 for VO_2; p = 0.9008 for Energy expenditure; p = 0.1843 for Body weight; p = 0.1969 for eWAT mass, n = 6).



Supplementary Figure 16. Hematoxylin/eosin staining of paraffin sections of eWAT of 18-month-old BDNF^{Pdgfra} KO mice and WT control mice. Size bars = 100μm.



Supplementary Figure 17. TUNEL staining of paraffin sections of eWAT of 18-month-old BDNF^{PDGFRA}KO mice and control mice (Size bar = 50μm). Sections were counter-stained with Methyl Green.

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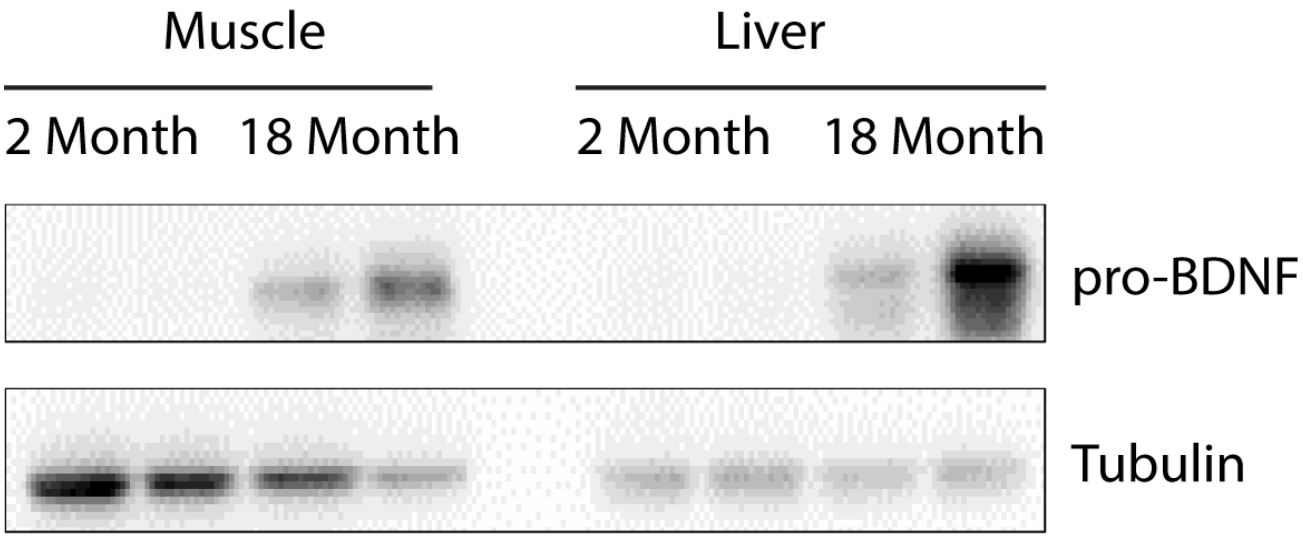

Supplementary Figure 18. Immunoblot analysis of pro-BDNF expression in liver and quadriceps muscle of mice.