

GENETIC DIVERSITY MODULATES THE PHYSICAL AND TRANSCRIPTOMIC RESPONSE OF
SKELETAL MUSCLE TO SIMULATED MICROGRAVITY IN MALE MICE

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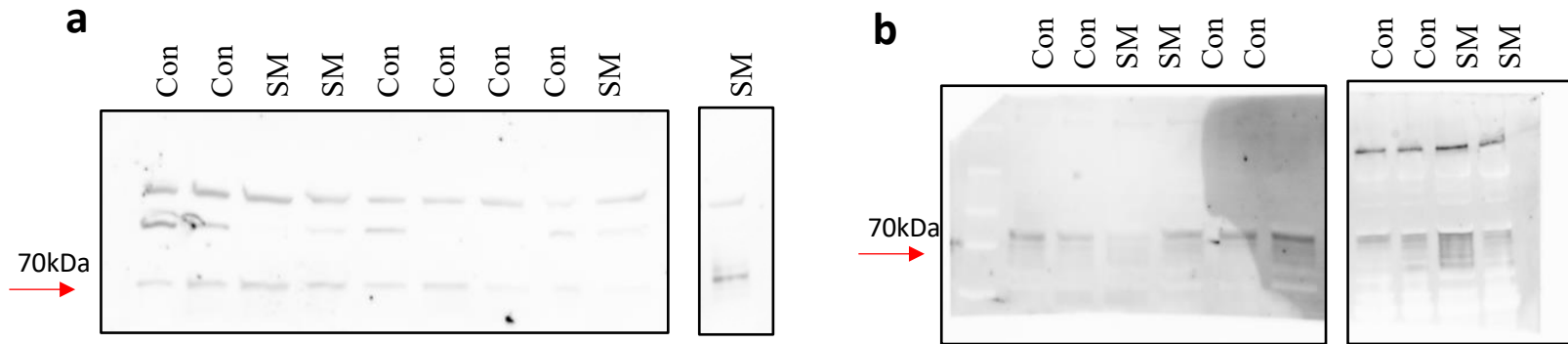
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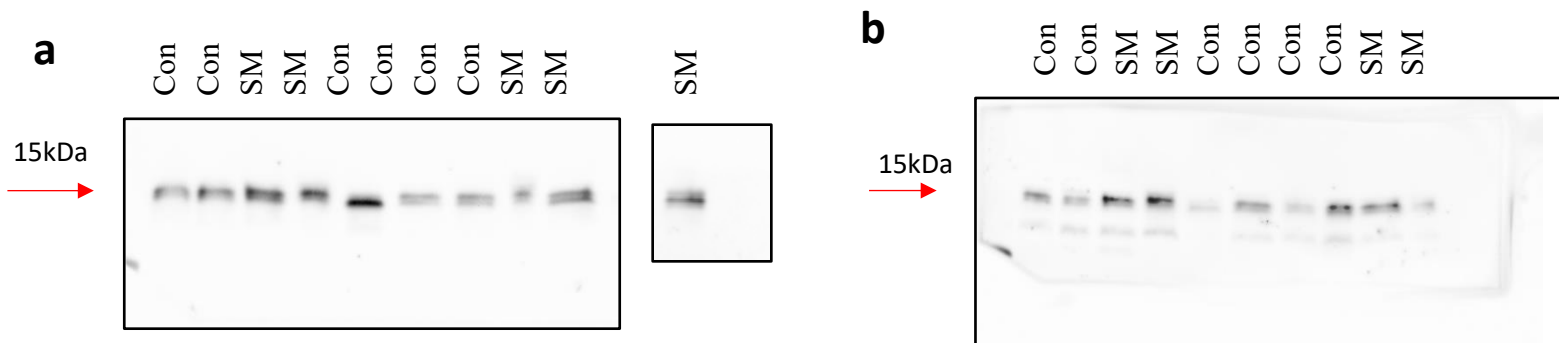
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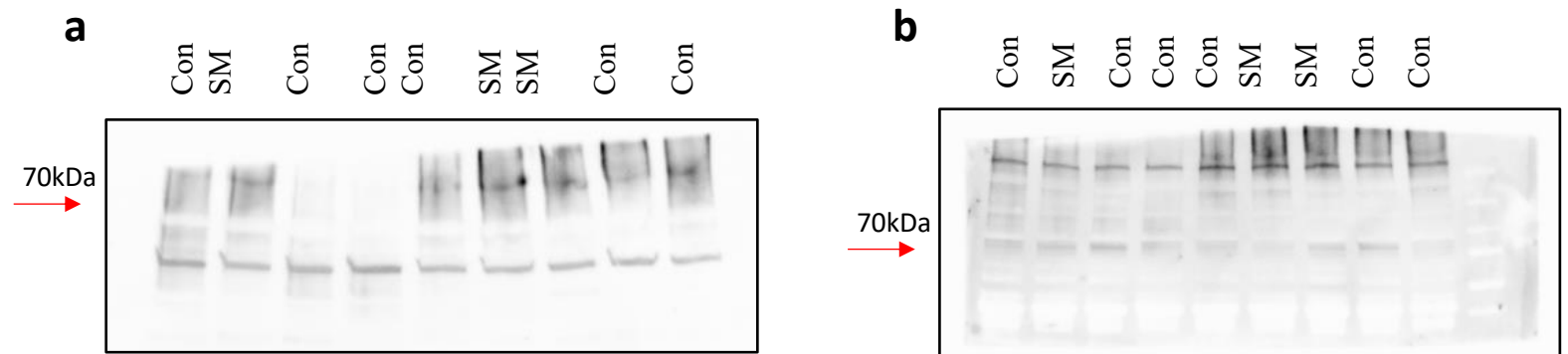
Supplementary Figure 3. WSB/EiJ p70S6K1 original western blot images. Quantification of total and phosphorylated p70S6K1 protein levels in WSB/EiJ mouse quadriceps. (a): total p70S6K1. The final sample was run on a gel separate from that on the left due to limitations in space. SM n=4; Con n=10. (b): phosphorylated p70S6K1 (T-389).



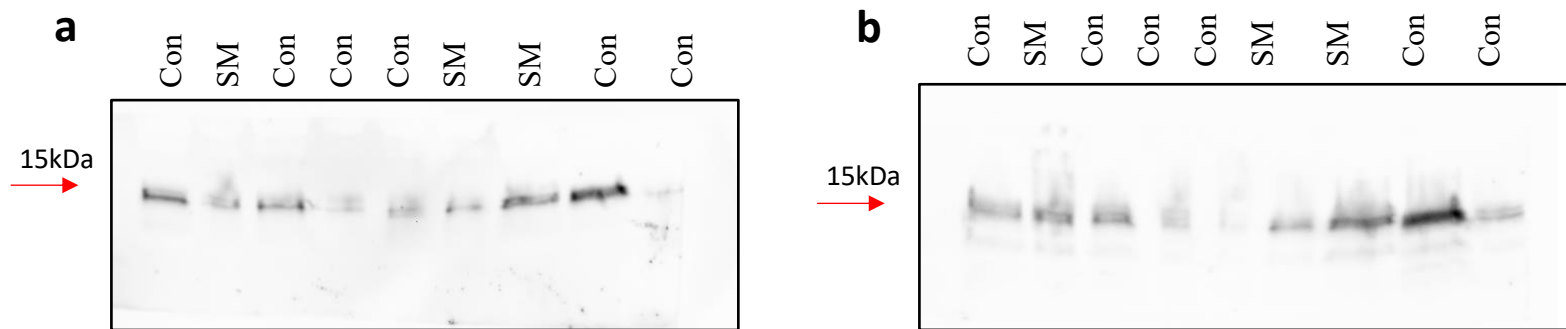
Supplementary Figure 4. WSB/EiJ 4EBP1 original western blot images. Quantification of total and phosphorylated 4EBP1 protein levels in WSB/EiJ mouse quadriceps. (a): total 4EBP1. The final sample was run on a gel separate from that on the left due to limitations in space. SM n=4; Con n=10. (b): phosphorylated 4EBP1 (T37/46). SM n=4; Con n=10.



Supplementary Figure 5. CAST/EiJ p70S6K1 original western blot images. Quantification of total and phosphorylated p70S6K1 protein levels in CAST/EiJ mouse quadriceps. (a): total p70S6K1. SM n=3; Con n=6. (b): phosphorylated p70S6K1 (T-389). SM n=3; Con n=6.



Supplementary Figure 6. CAST/EiJ 4EBP1 original western blot images. Quantification of total and phosphorylated 4EBP1 protein levels in CAST/EiJ mouse quadriceps. (a): total 4EBP1. SM n=3; Con n=6. (b): phosphorylated 4EBP1 (T37/46). SM n=3; Con n=6.

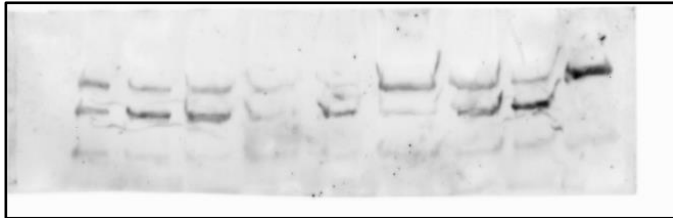


Supplementary Figure 7. 129S1/SvImJ p70S6K1 original western blot images. Quantification of total and phosphorylated p70S6K1 protein levels in 129S1/SvImJ mouse quadriceps. (a): total p70S6K1. SM n=3; Con n=6. (b): phosphorylated p70S6K1 (T-389). SM n=3; Con n=6.

a

SM Con Con Con SM SM Con Con Con

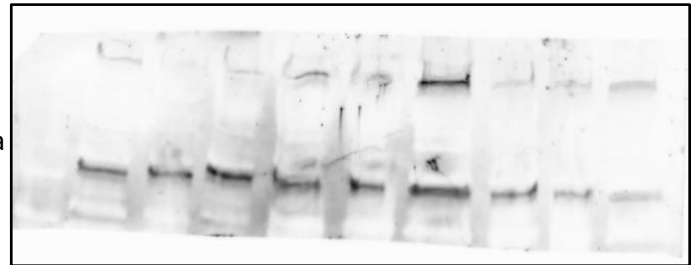
70kDa
→



b

SM Con Con Con SM SM Con Con

70kDa
→

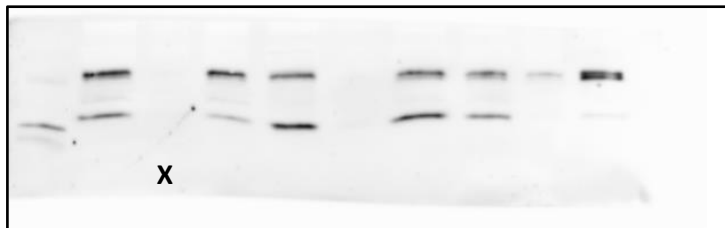


Supplementary Figure 8. 129S1/SvImJ 4EBP1 original western blot images. Quantification of total and phosphorylated 4EBP1 protein levels in 129S1/SvImJ mouse quadriceps. (a): total 4EBP1. SM n=3; Con n=5. (b): phosphorylated 4EBP1 (T37/46). SM n=3; Con n=6.

a

SM Con Con Con SM SM Con Con Con

15kDa
→



b

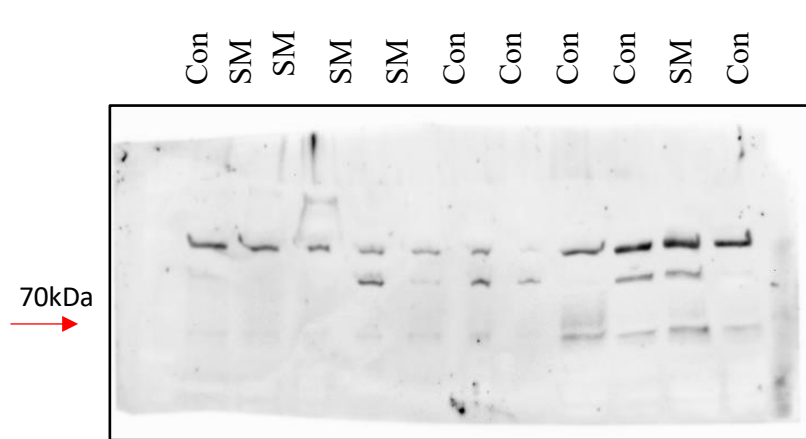
SM Con Con Con SM SM Con Con Con

15kDa
→

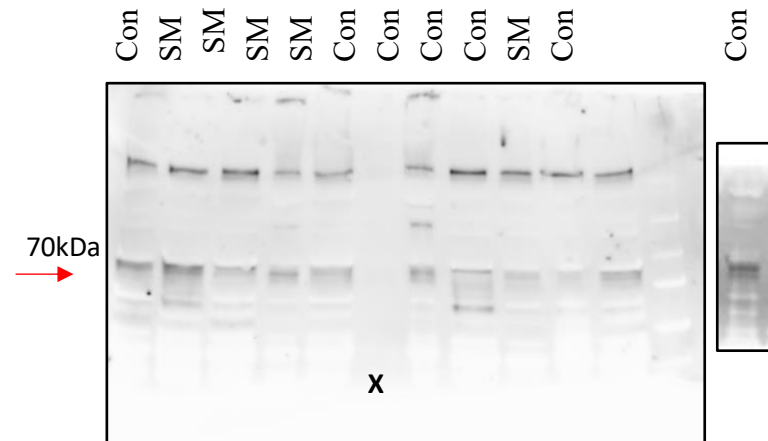


Supplementary Figure 9. NZO/HILtJ p70S6K1 original western blot images. Quantification of total and phosphorylated p70S6K1 protein levels in NZO/HILtJ mouse quadriceps. (a): total p70S6K1. SM n=5; Con n=6. (b): phosphorylated p70S6K1 (T-389), the final sample was run on a different gel as a repeat of lane 6. SM n=5; Con n=6.

a

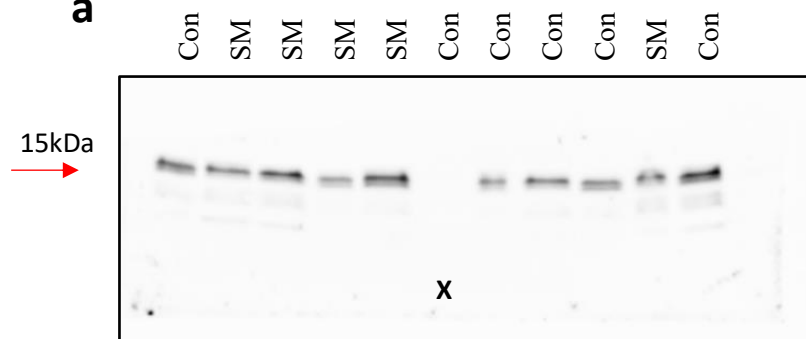


b

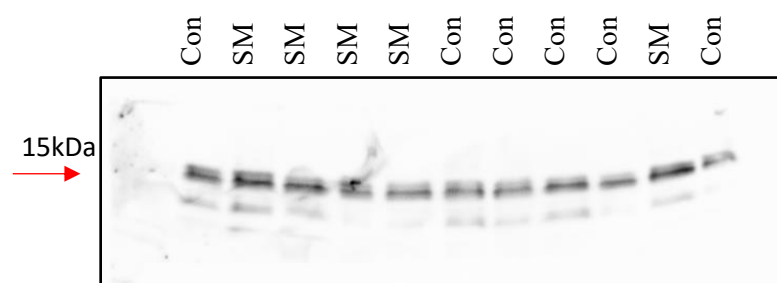


Supplementary Figure 10. NZO/HILtJ 4EBP1 original western blot images. Quantification of total and phosphorylated 4EBP1 protein levels in NZO/HILtJ mouse quadriceps. (a): total 4EBP1. SM n=5; Con n=5. (b): phosphorylated 4EBP1 (T37/46). SM n=5; Con n=6.

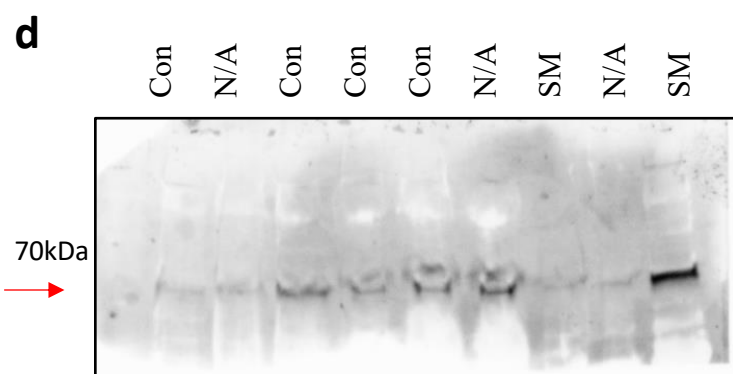
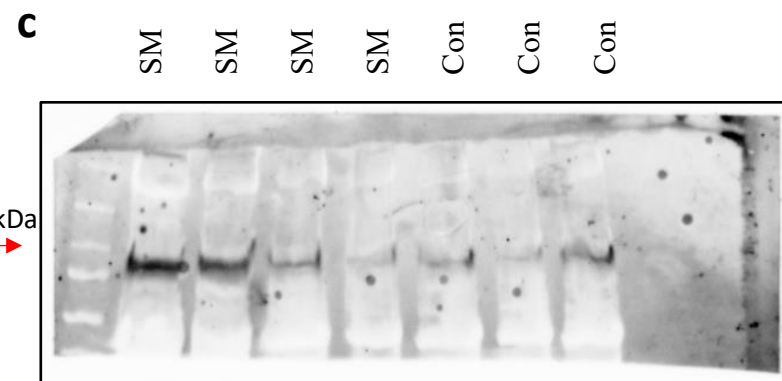
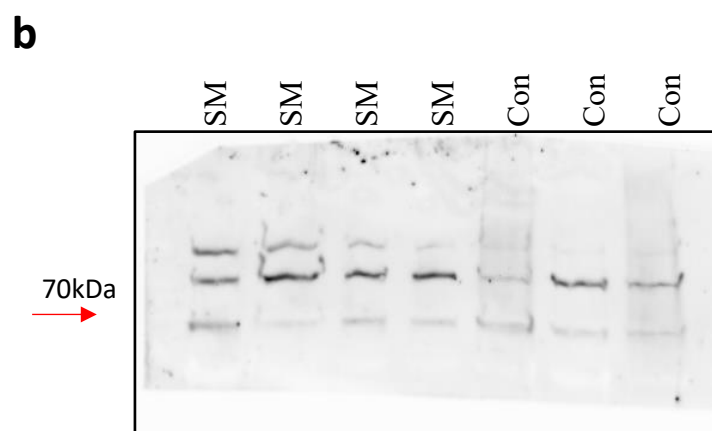
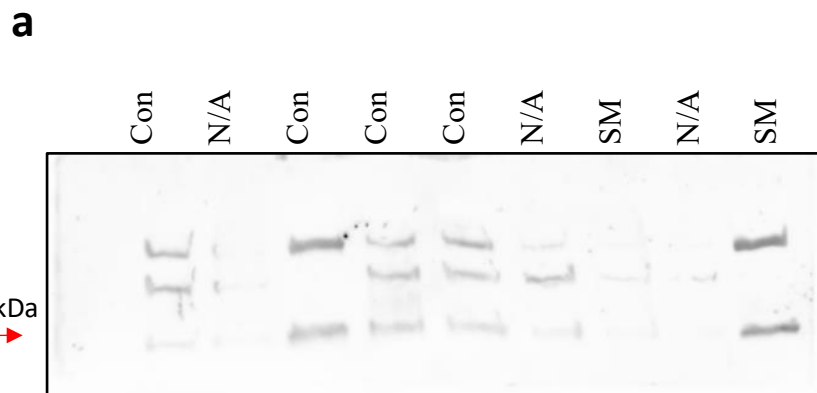
a



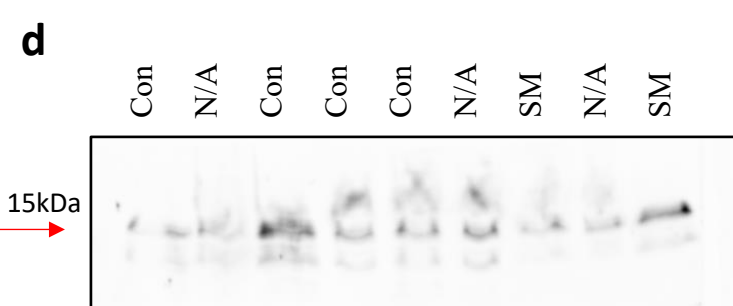
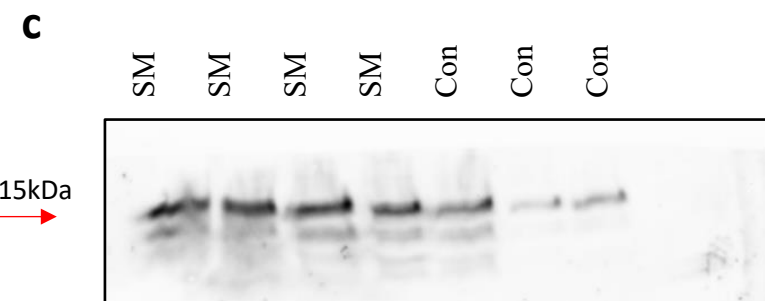
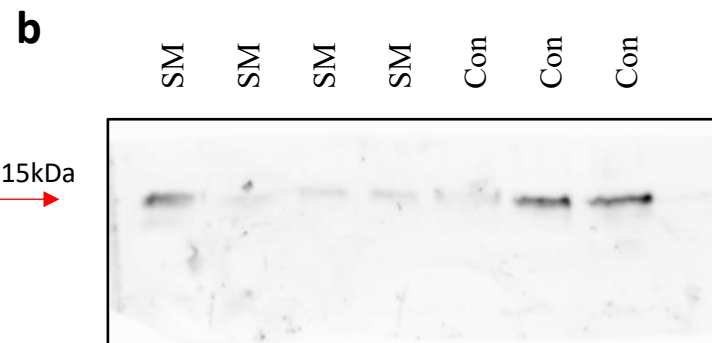
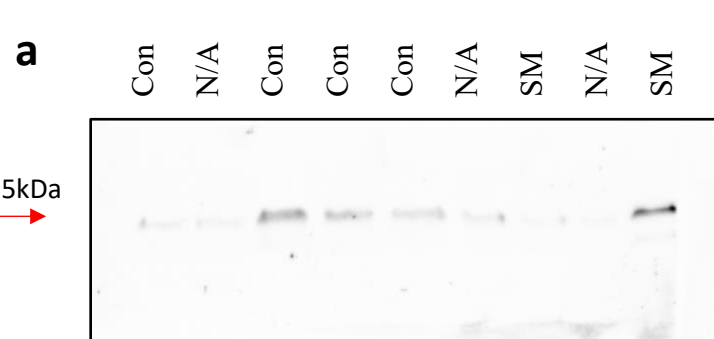
b



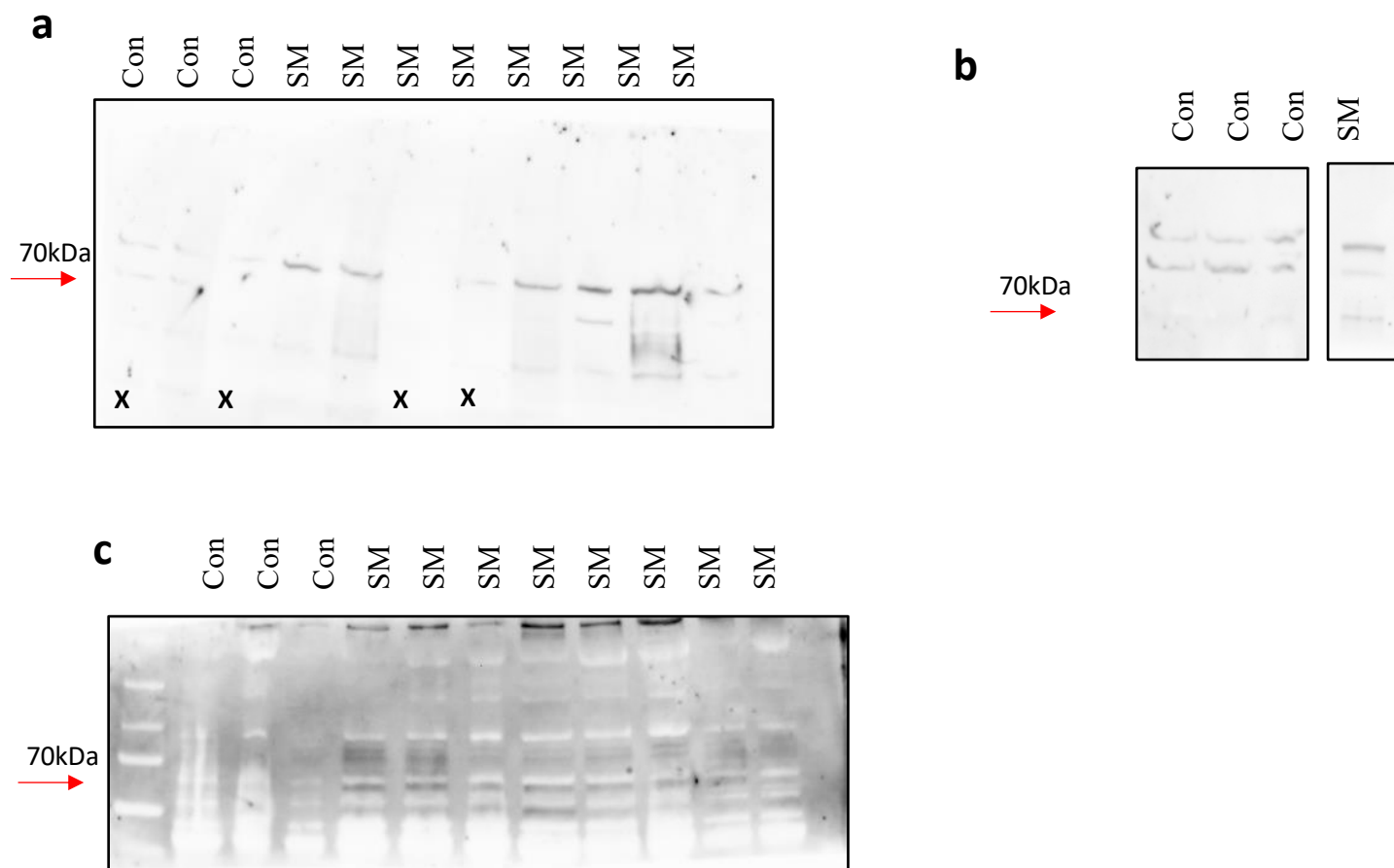
Supplementary Figure 11. NOD/ShiLtJ p70S6K1 original western blot images. Quantification of total and phosphorylated p70S6K1 protein levels in NOD/ShiLtJ mouse quadriceps. (a-b): total p70S6K1 ran on two gels due to space limitations. SM n=6; Con n=7. (c-d): phosphorylated p70S6K1 (T-389) ran on two gels due to space limitations. SM n=6; Con n=7.



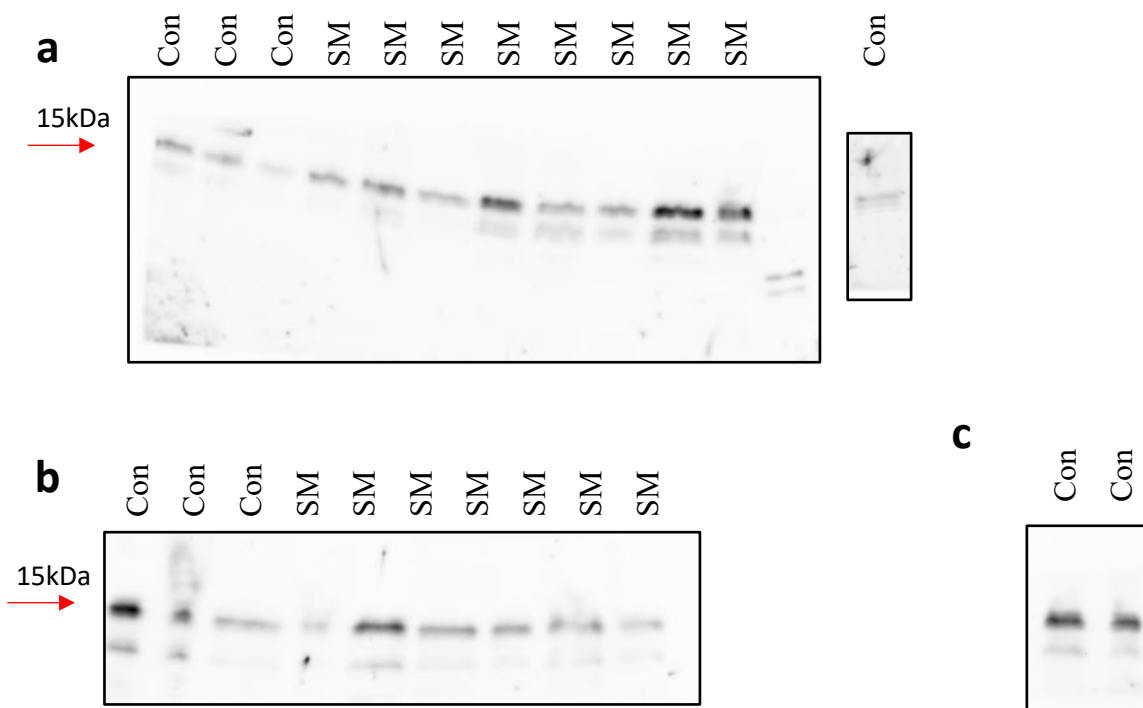
Supplementary Figure 12. NOD/ShiLtJ 4EBP1 original western blot images. Quantification of total and phosphorylated 4EBP1 protein levels in NOD/ShiLtJ mouse quadriceps. (a-b): total 4EBP1 ran on two gels due to space limitations. SM n=6; Con n=7. (c-d): phosphorylated 4EBP1 (T37/46) ran on two gels due to space limitations. SM n=6; Con n=7.



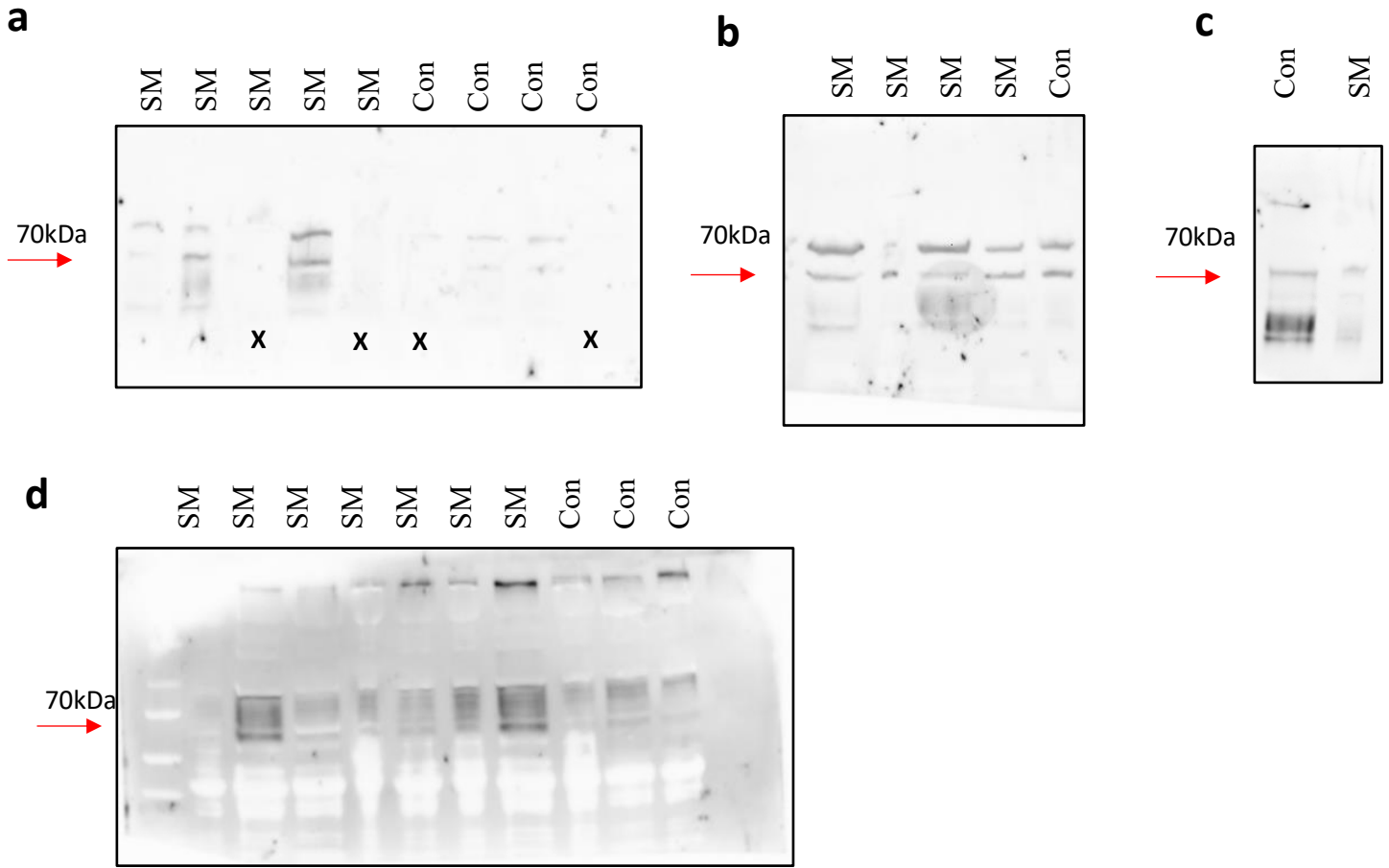
Supplementary Figure 13. A/J p70S6K1 original western blot images. Quantification of total and phosphorylated p70S6K1 protein levels in A/J mouse quadriceps. (a-b): total p70S6K1. The latter 4 samples were repeated due to quality issues in the first run. SM n=6; Con n=4. (b): phosphorylated p70S6K1 (T-389). SM n=8; Con n=3.



Supplementary Figure 14. A/J 4EBP1 original western blot images. Quantification of total and phosphorylated 4EBP1 protein levels in A/J mouse quadriceps. (a): total 4EBP1. Final lane run on separate gel due to space constraints. SM n=8; Con n=4. (b-c): phosphorylated 4EBP1 (T37/46). The latter two samples were rerun due to quality issues. SM n=7; Con n=5.



Supplementary Figure 15. C57BL/6J p70S6K1 original western blot images. Quantification of total and phosphorylated p70S6K1 protein levels in C57BL/6J mouse quadriceps. (a-c): total p70S6K1. Run on 3 gels due to quality issues with secondary antibodies and space limitations. SM n=8; Con n=4. (d): phosphorylated p70S6K1 (T-389). SM n=7; Con n=3.



Supplementary Figure 16. C57BL/6J 4EBP1 original western blot images. Quantification of total and phosphorylated 4EBP1 protein levels in C57BL/6J mouse quadriceps. (a-b): total 4EBP1. Run on two separate gels due to space constraints. SM n=8; Con n=4. (c-d): phosphorylated 4EBP1 (T37/46). Run on two separate gels due to space constraints. SM n=7; Con n=5.

