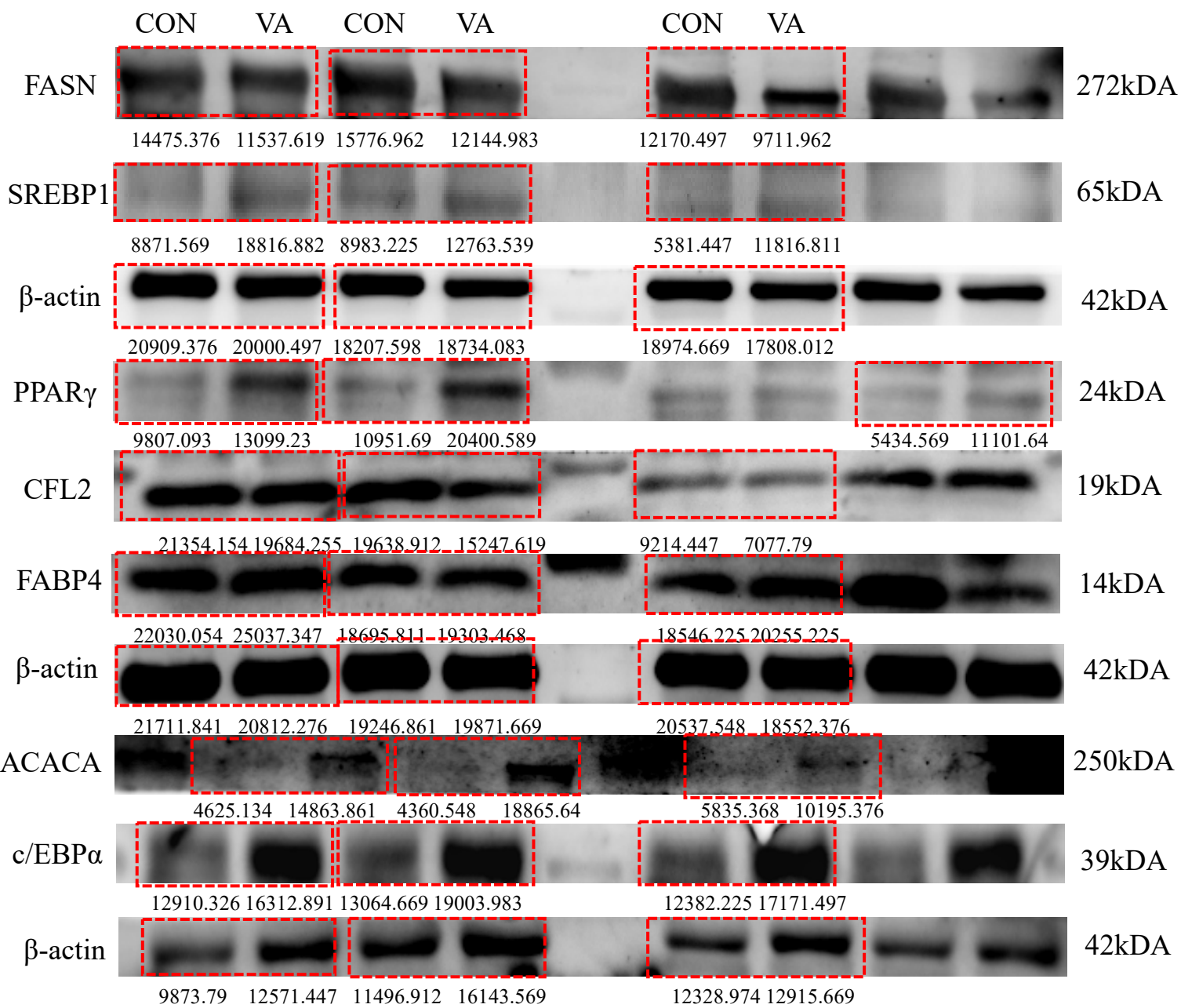
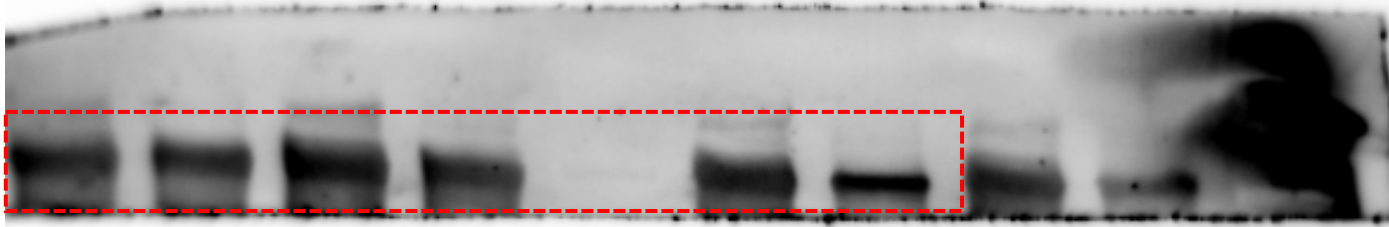
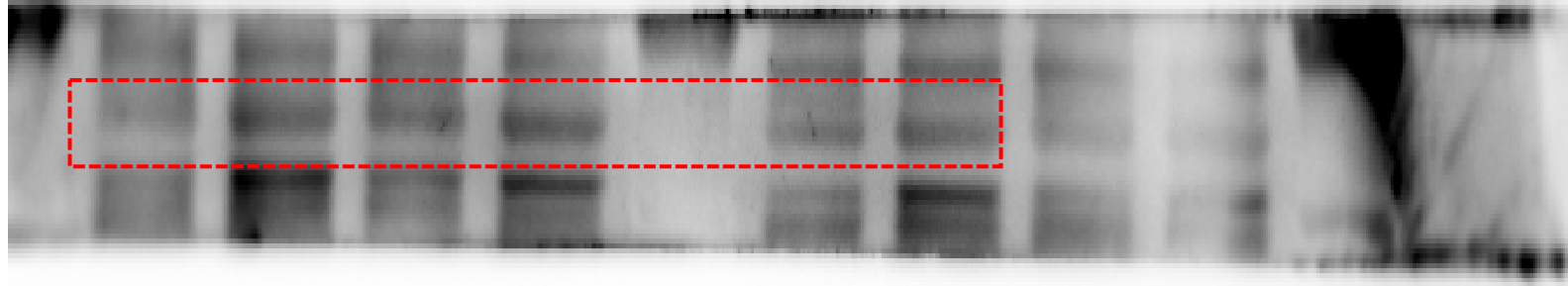


Figure 1(E). Analysis of the expression of fat synthesis-related proteins in the longissimus dorsi muscle.

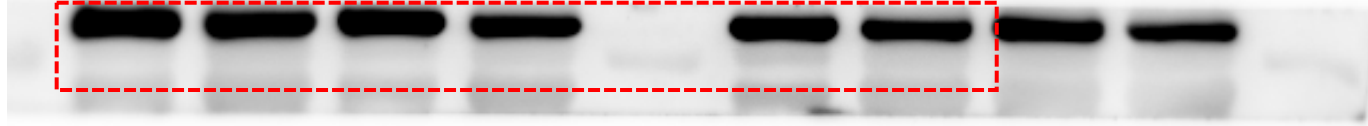




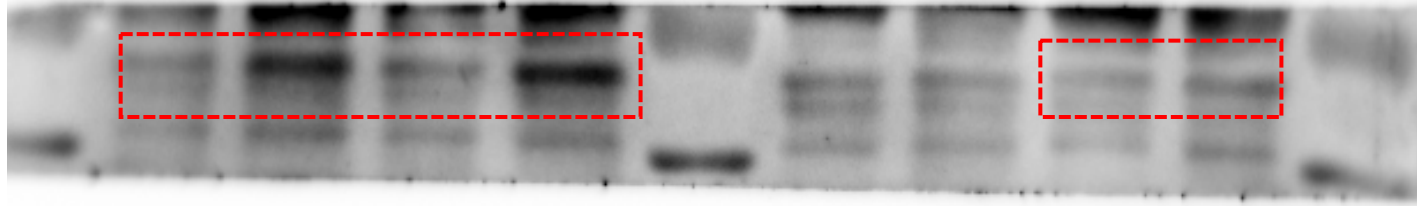
SREBP1



β -actin_1



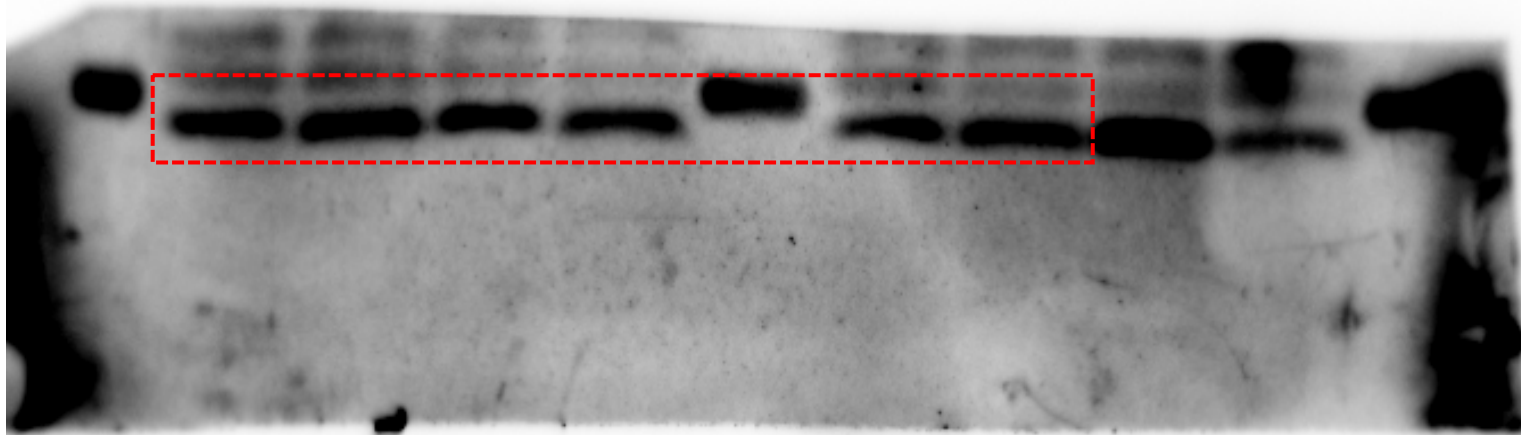
PPAR γ



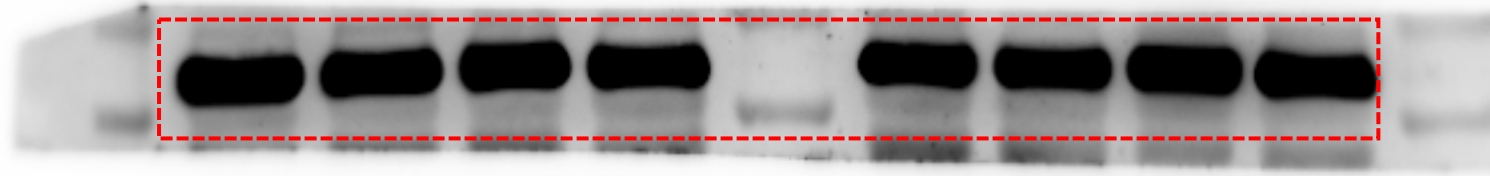
CFL2

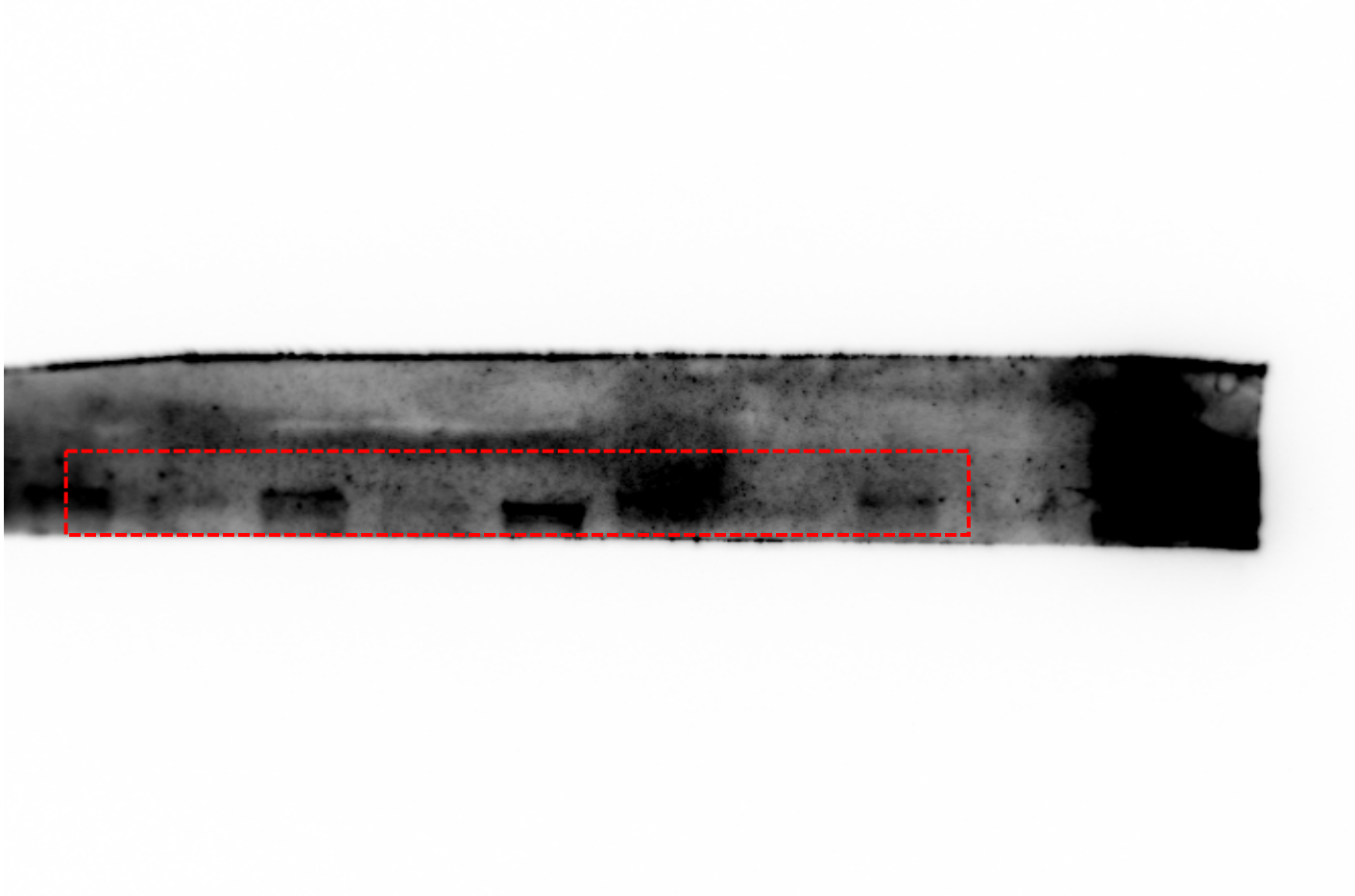


FABP4

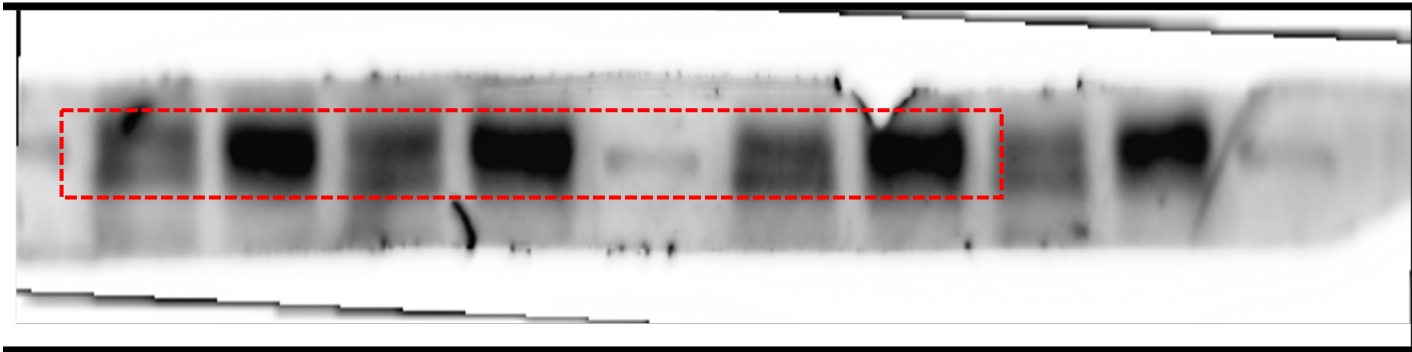


β -actin_2





c/EBP α



β -actin_3

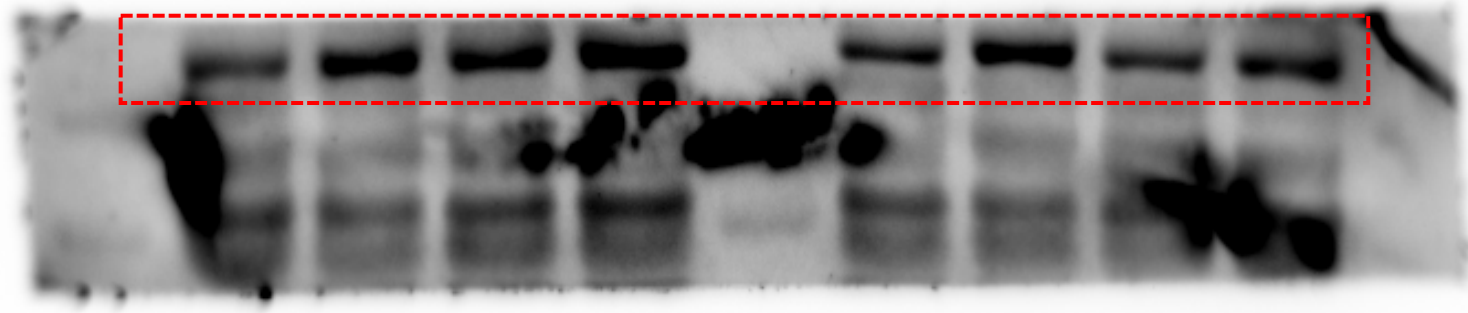
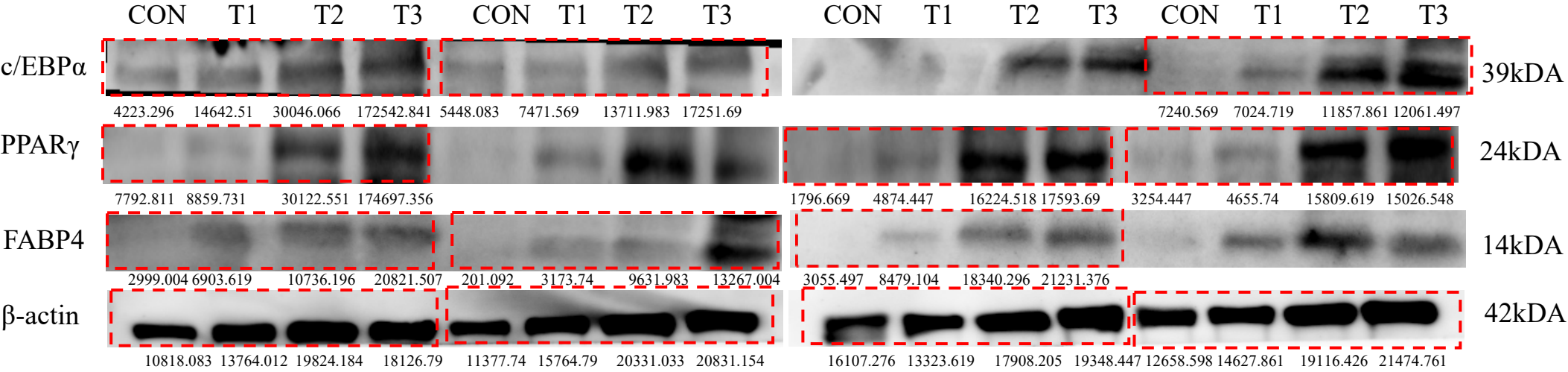
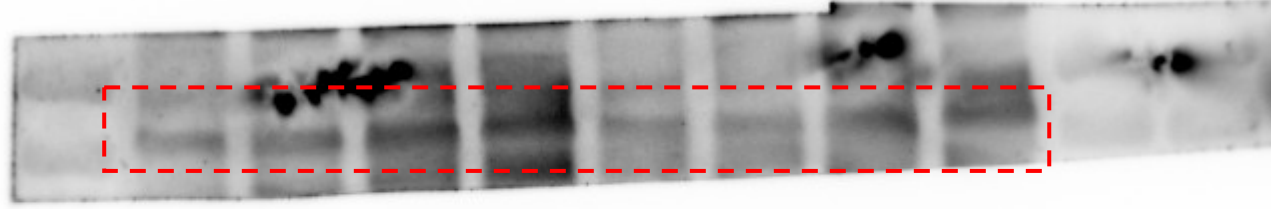


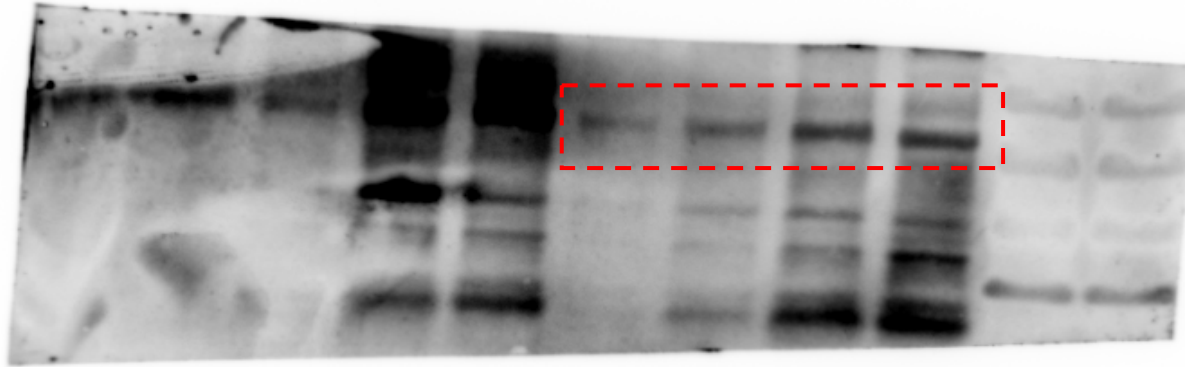
Figure 2(D). Expression of adipogenesis-related proteins in BSMCs of Woking black cattle.



c/EBP α

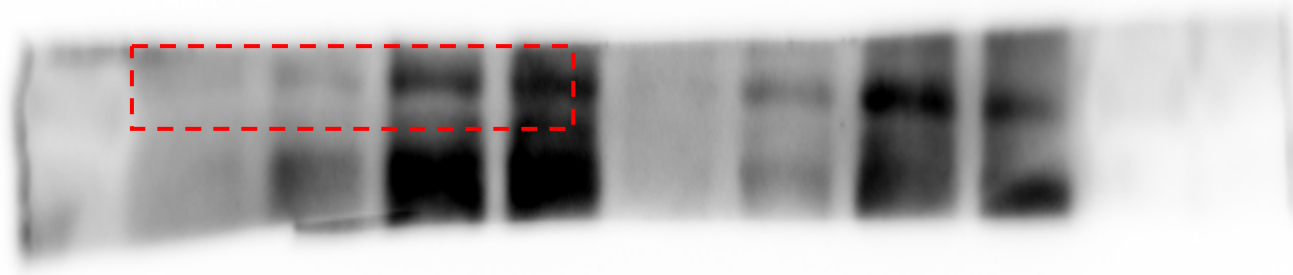


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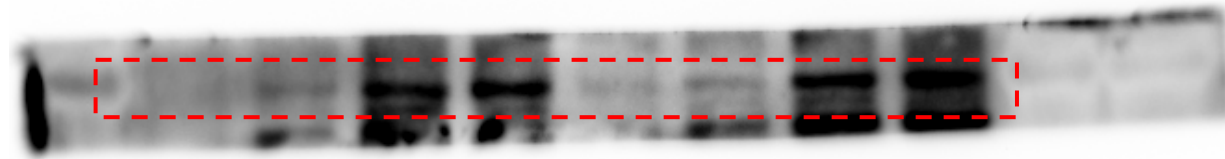


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PPAR γ

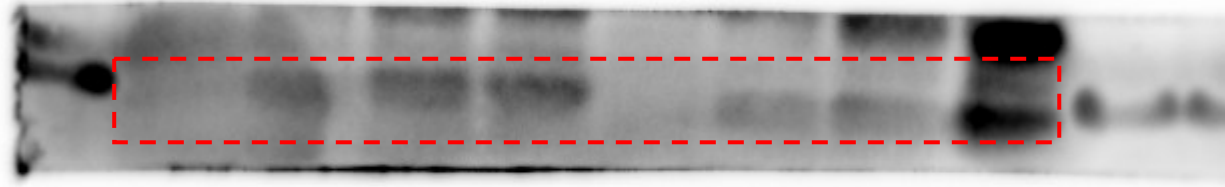


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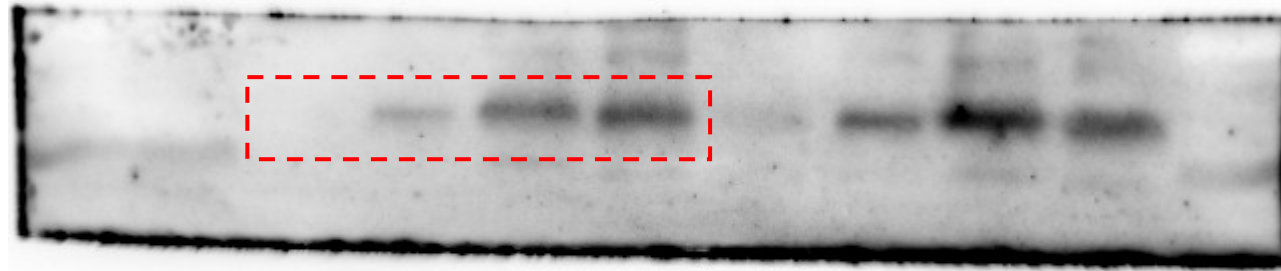


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FABP4

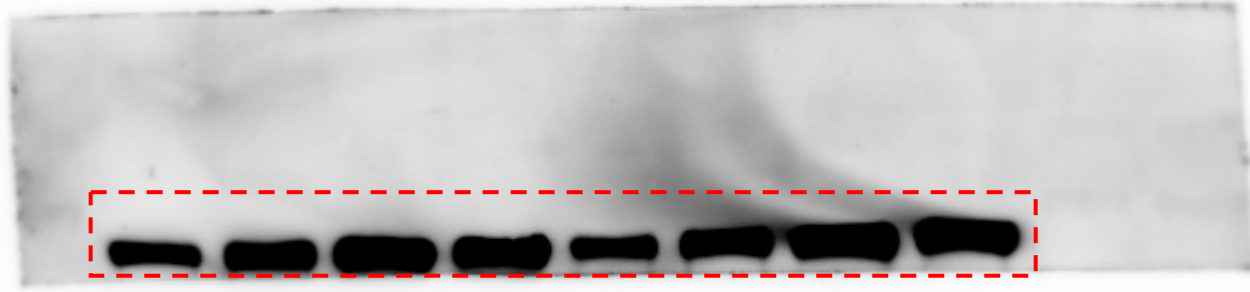


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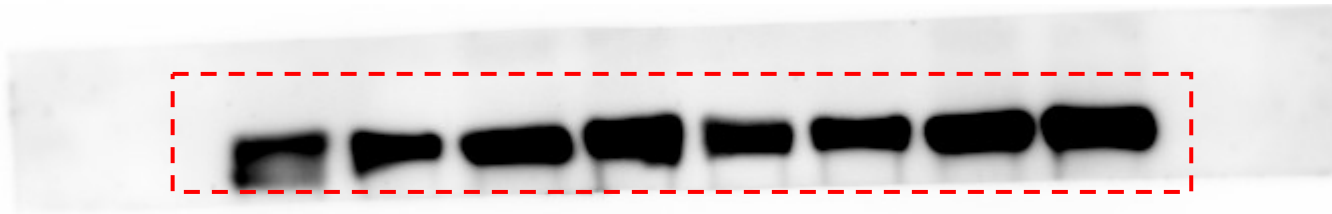


(2)

β -actin

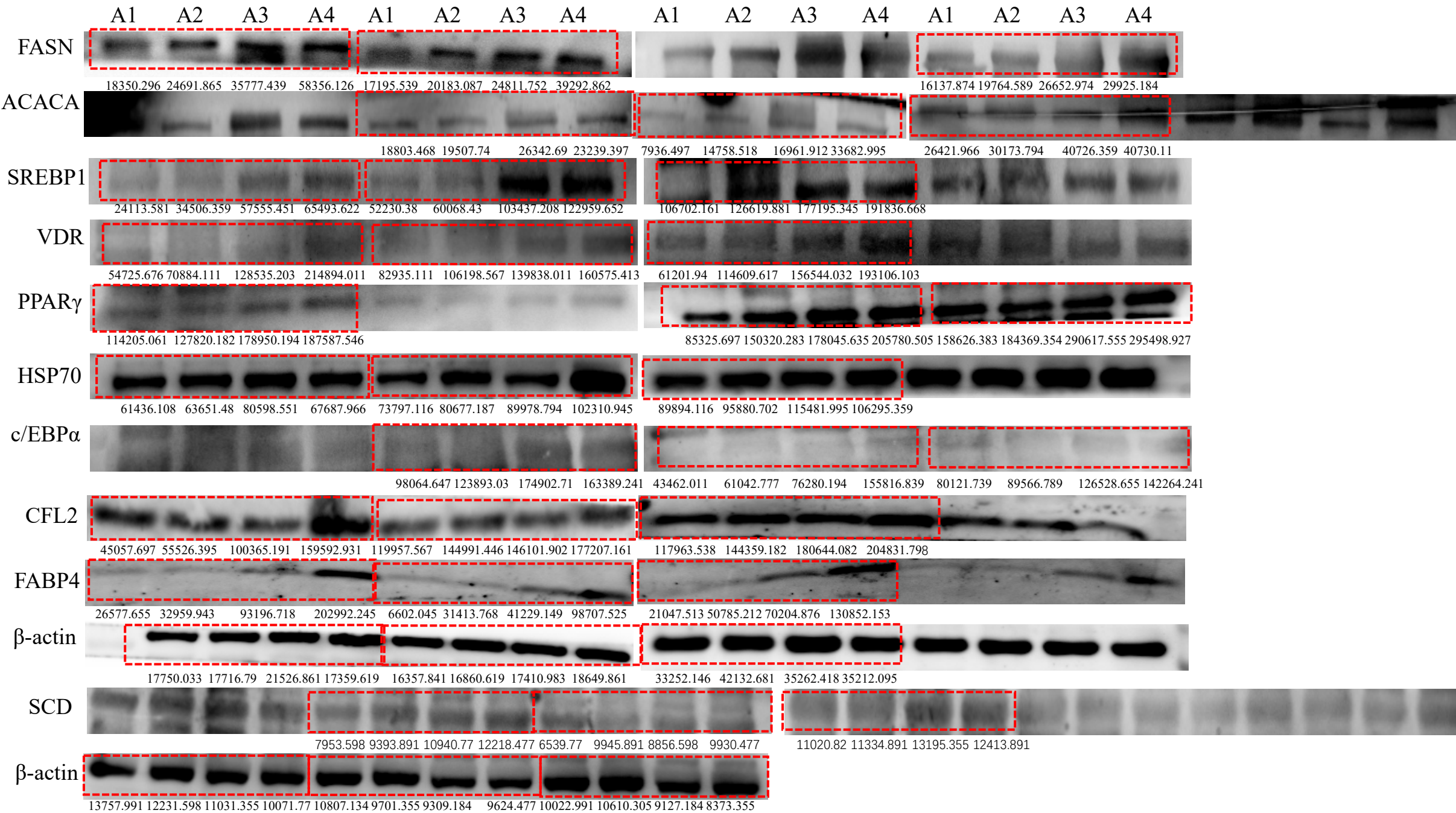


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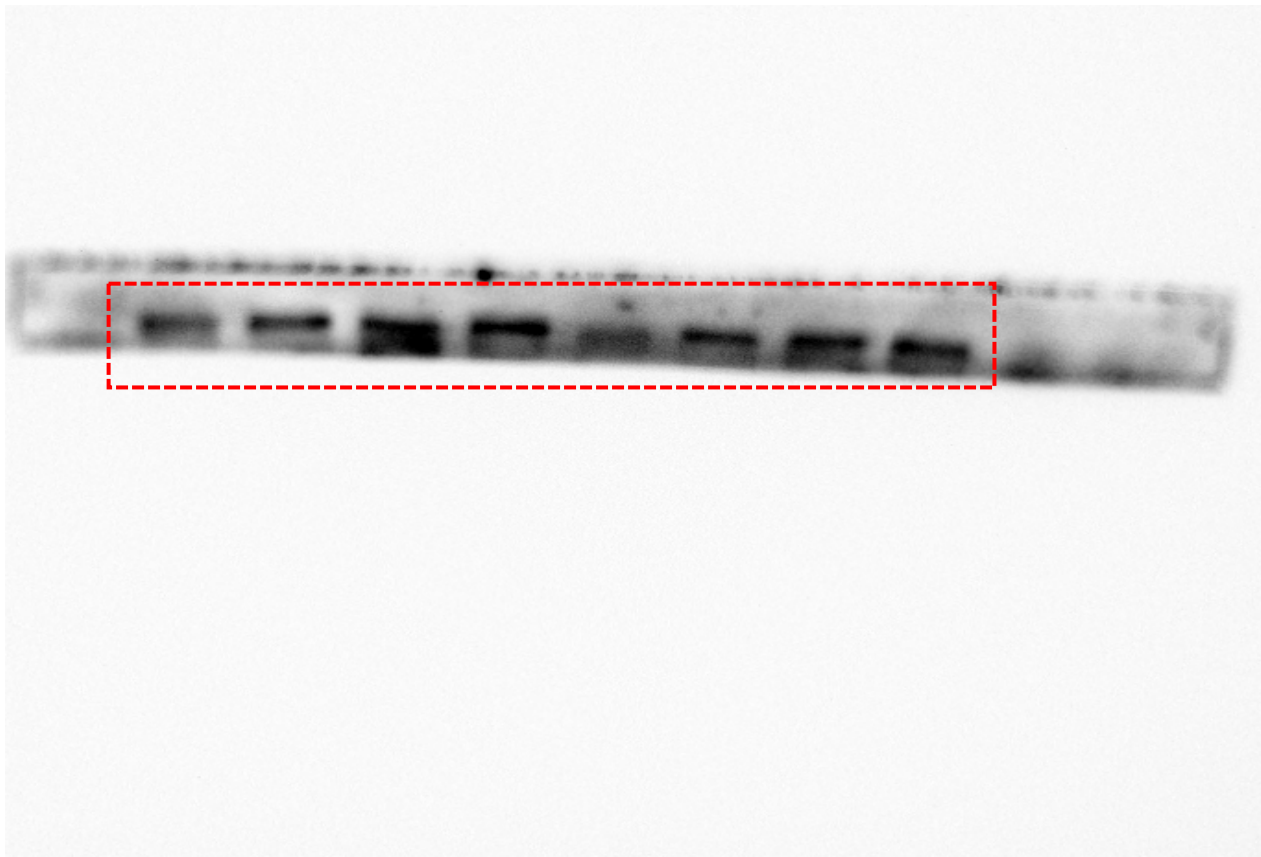


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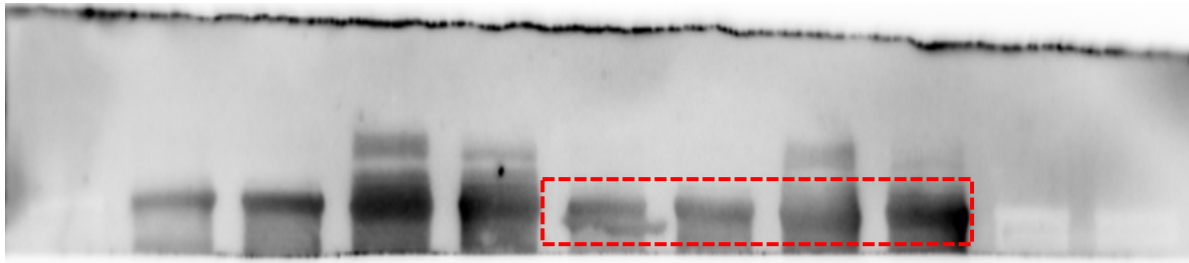
Figure 5(A). Vitamin A supplementation during late fattening period enhances adipogenic protein expression in Woking black cattle.



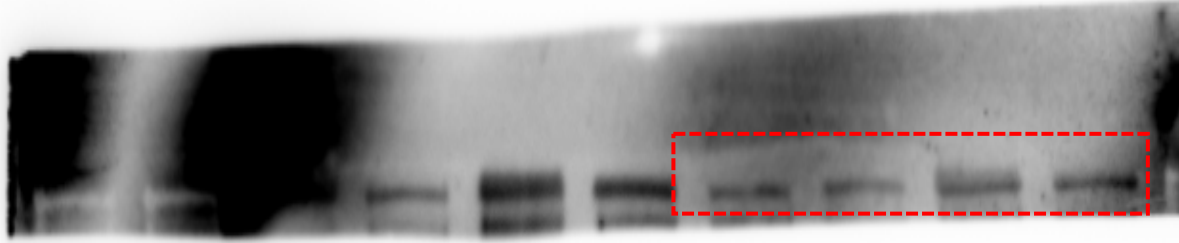
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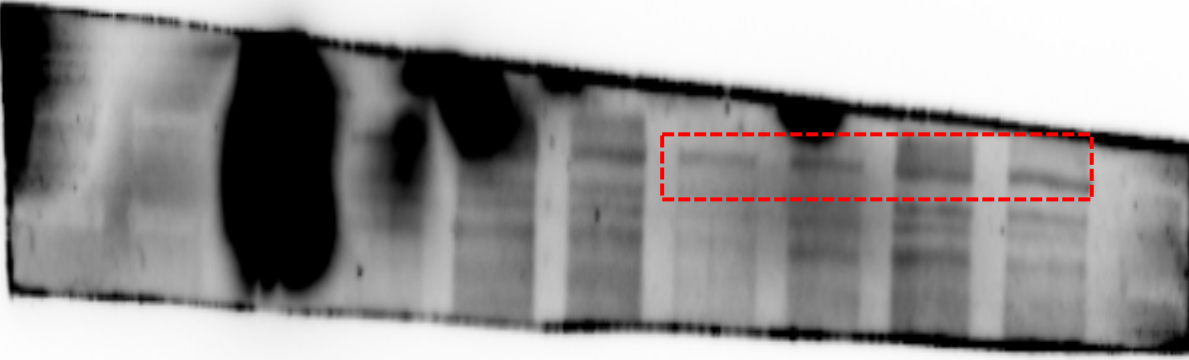
(2)



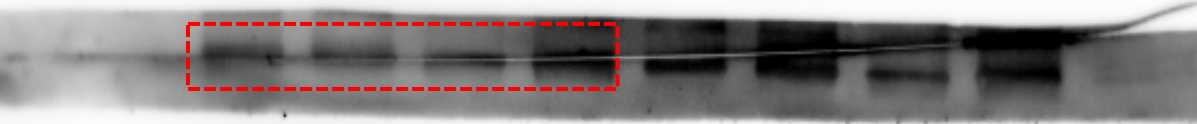
(1)



(2)

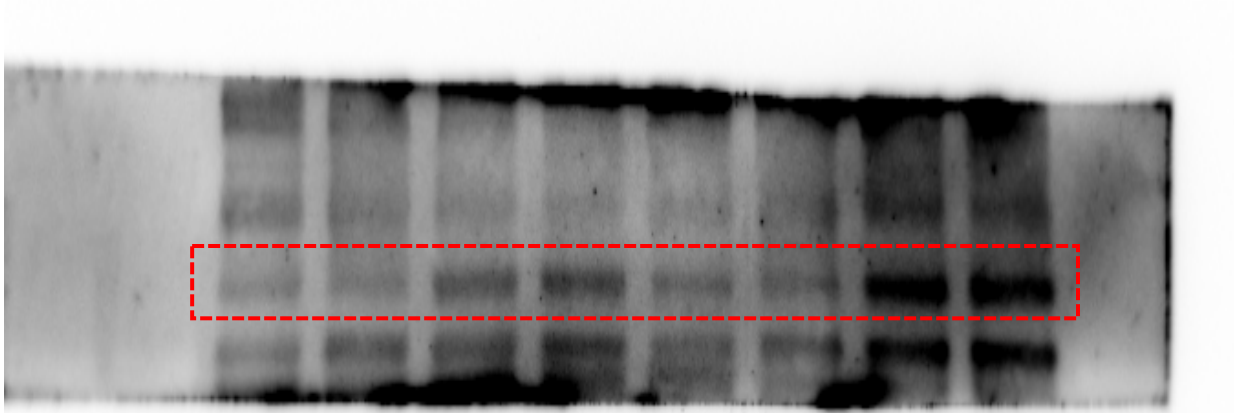


(3)

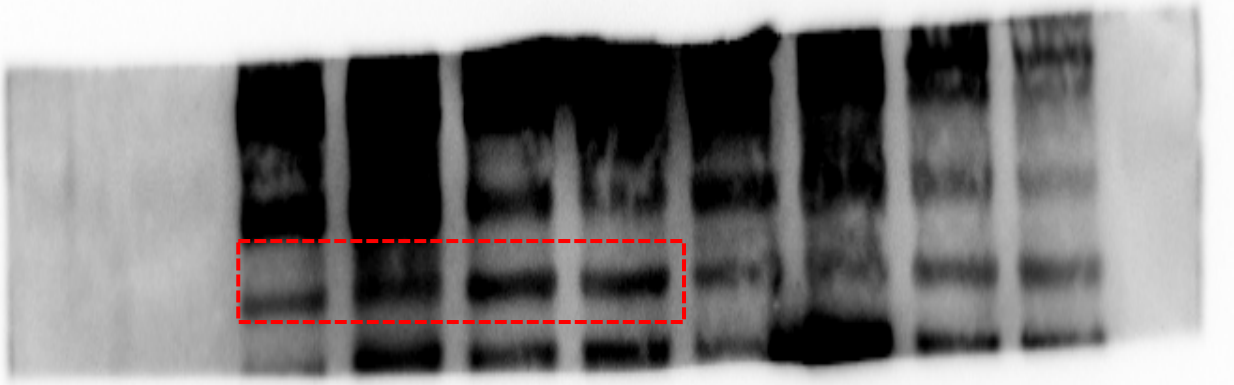


SREBP1

(1)

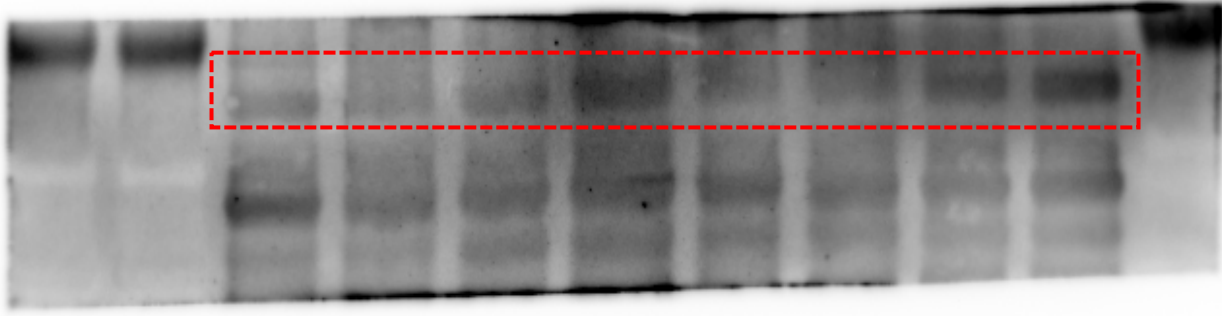


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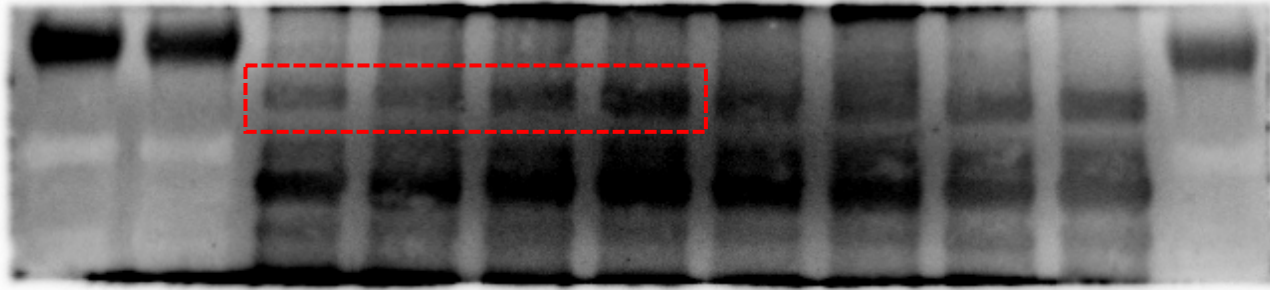


VDR

(1)

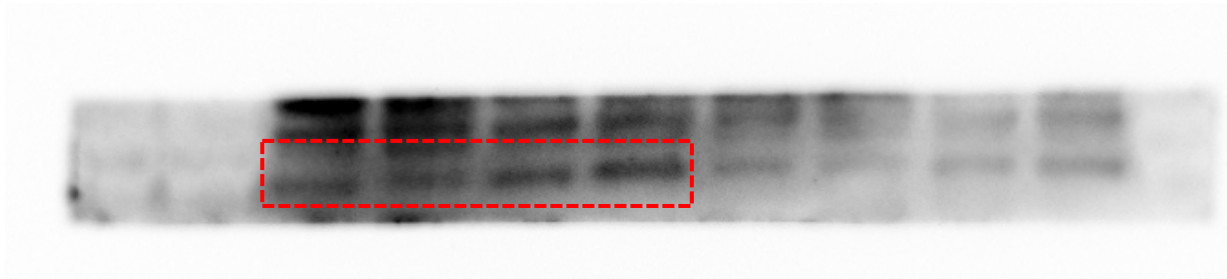


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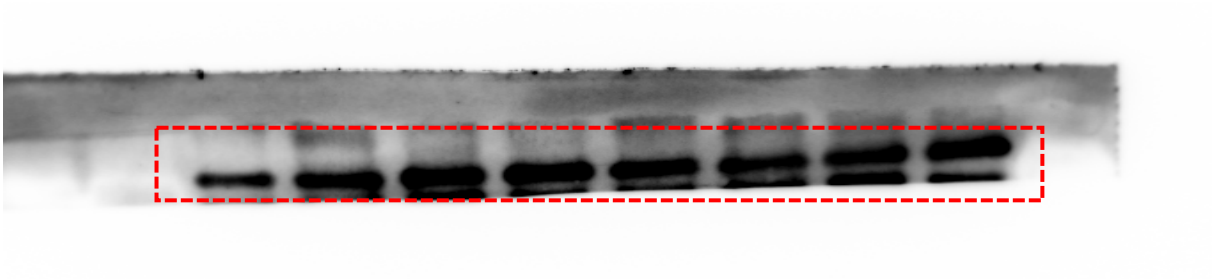


PPAR γ

(1)

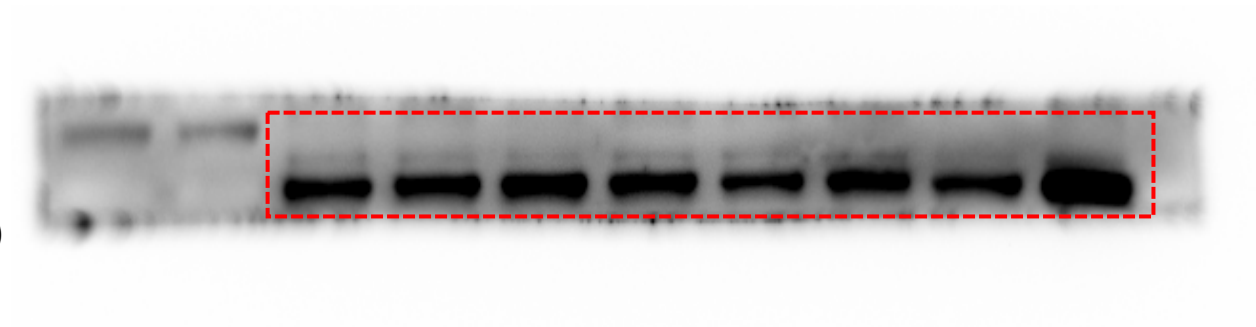


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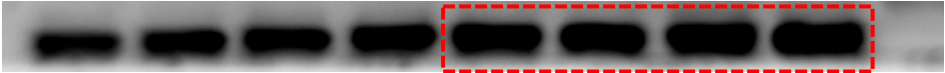


HSP70

(1)

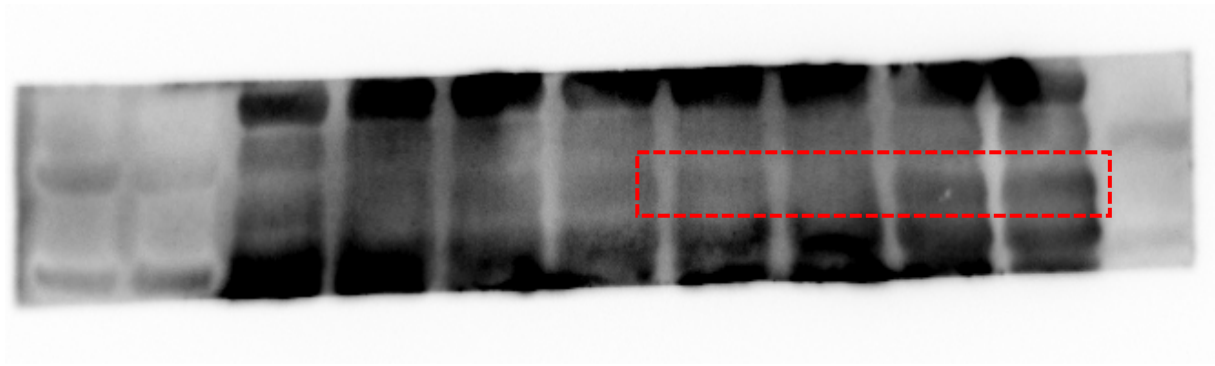


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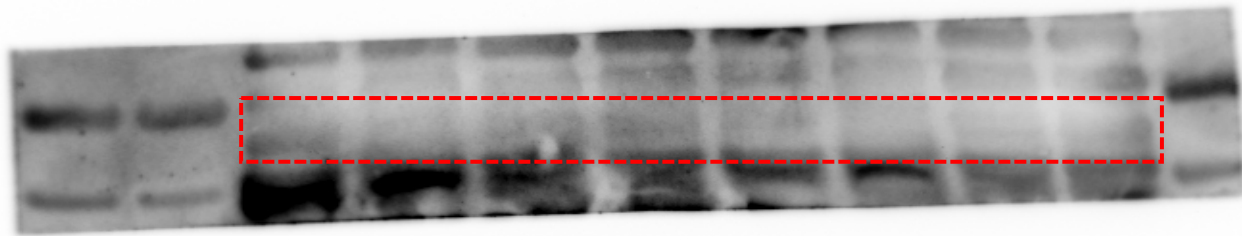


c/EBP α

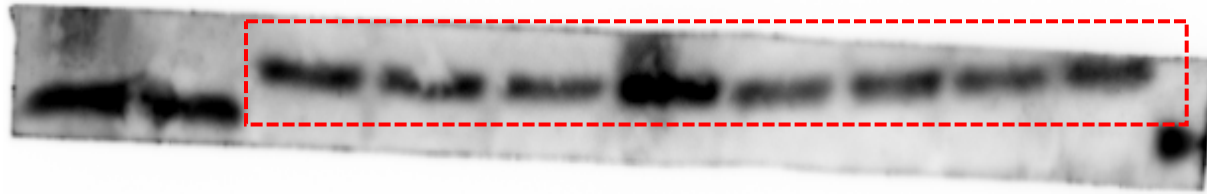
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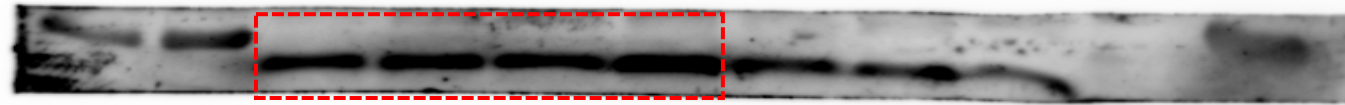
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(1)

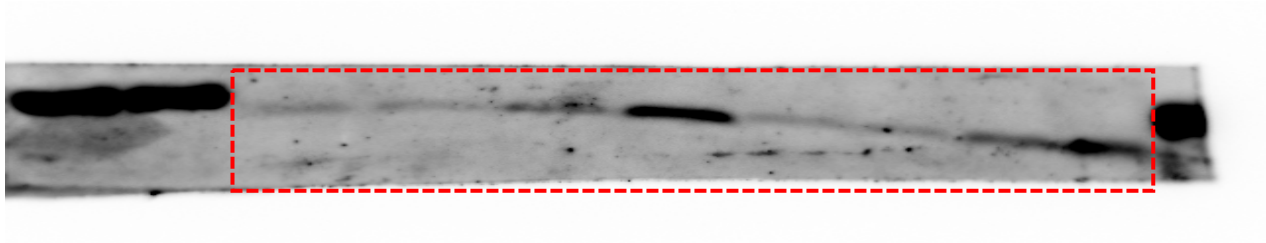


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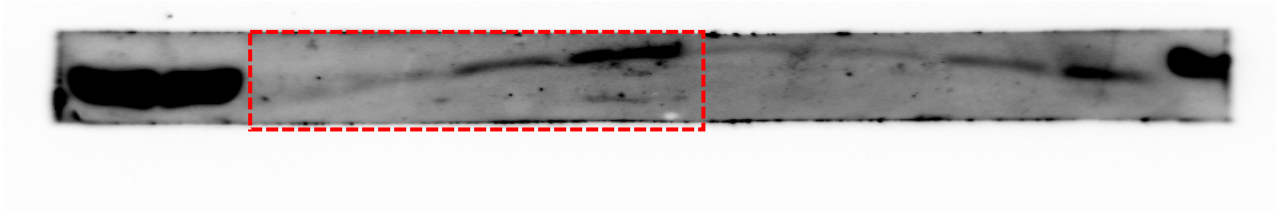


FABP4

(1)



(2)



β -actin_1

(1)

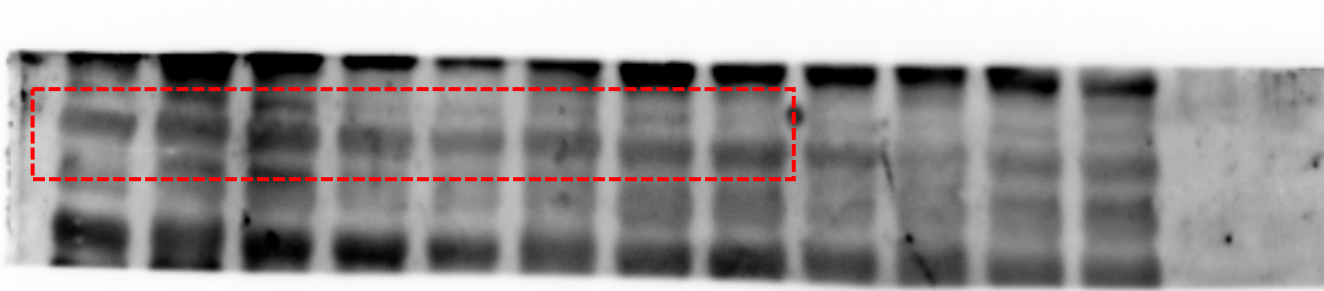


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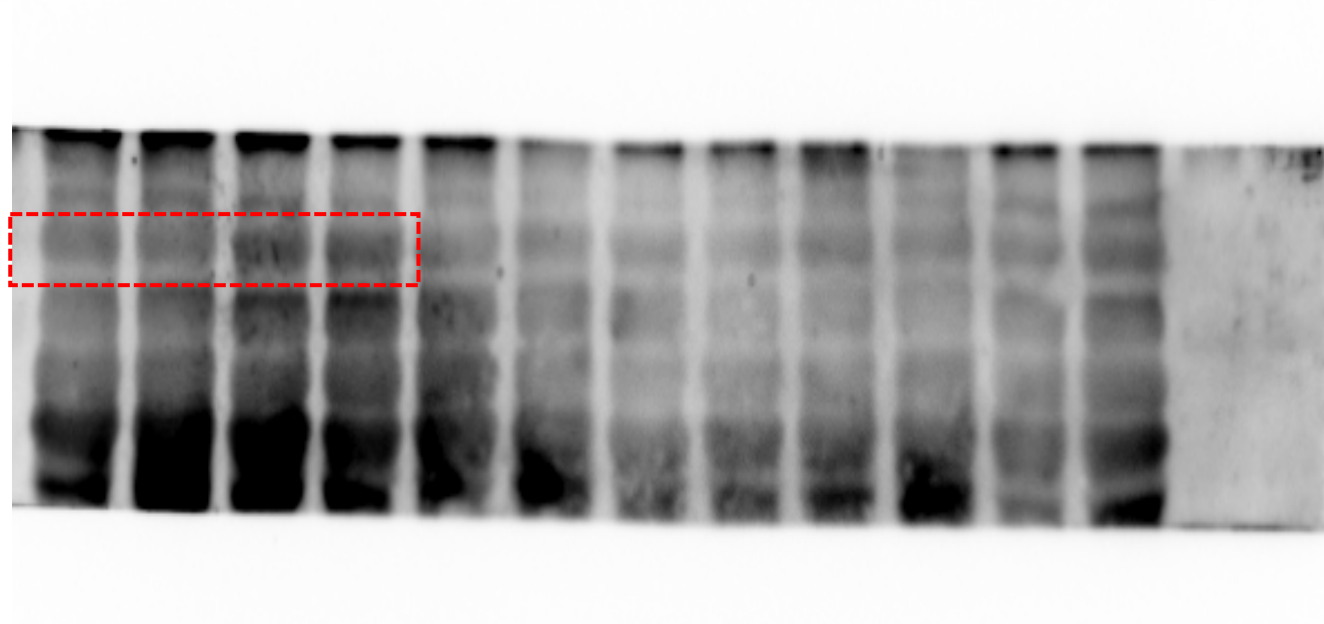


SCD

(1)



(2)



β -actin_2

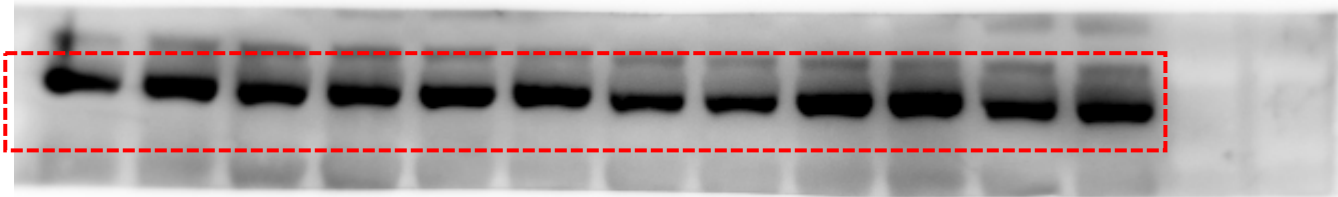
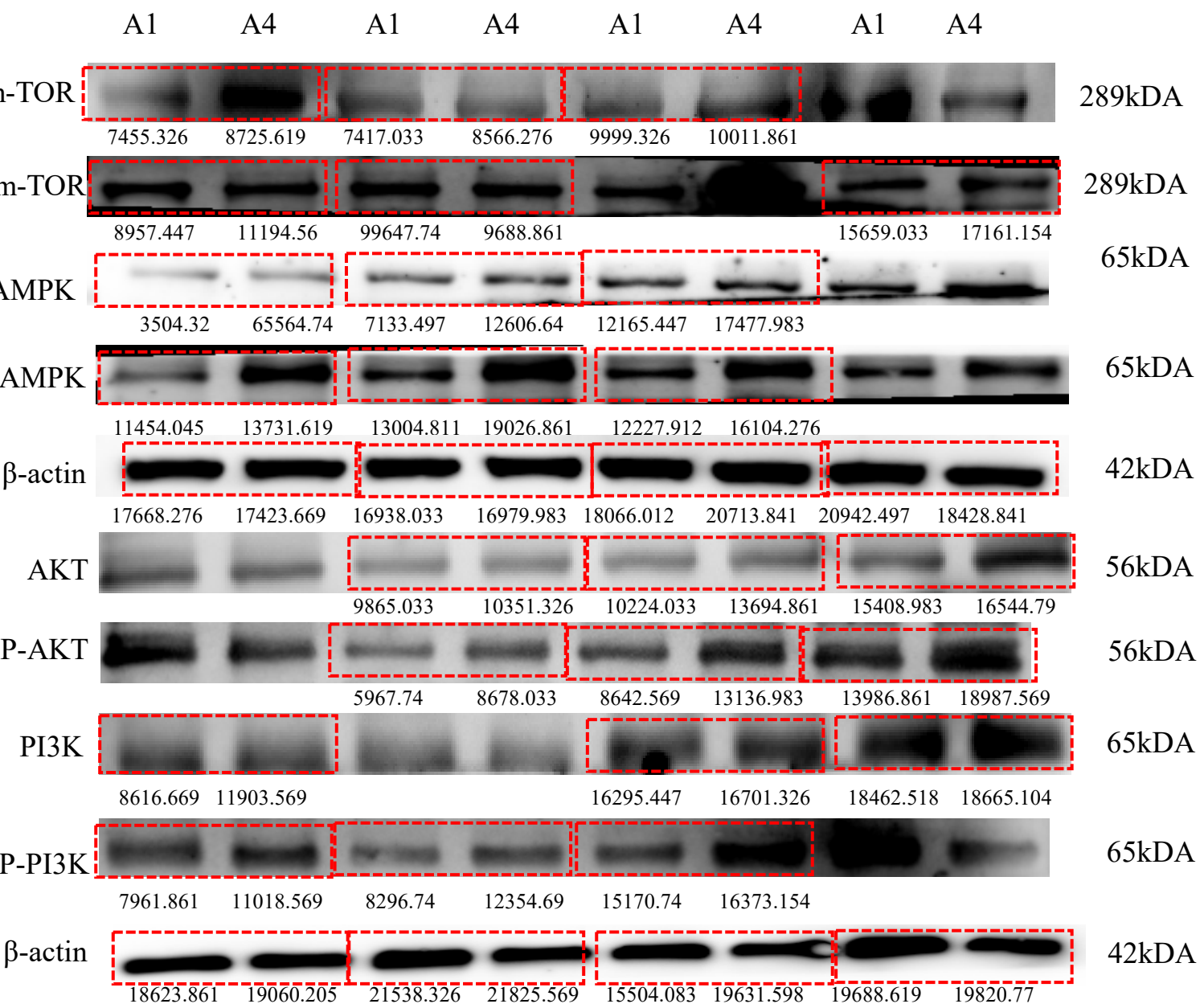
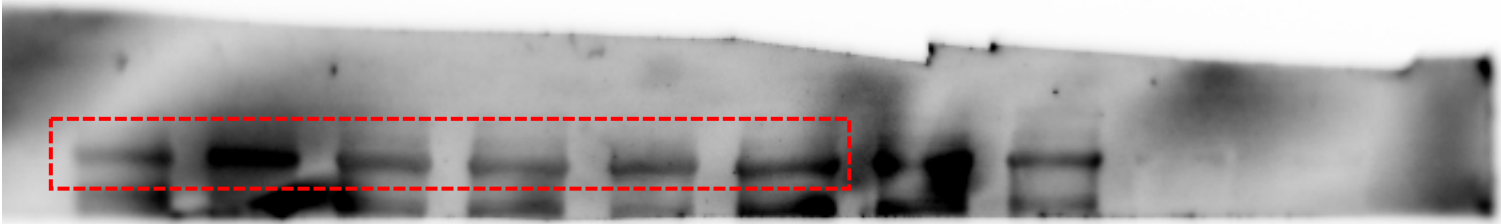
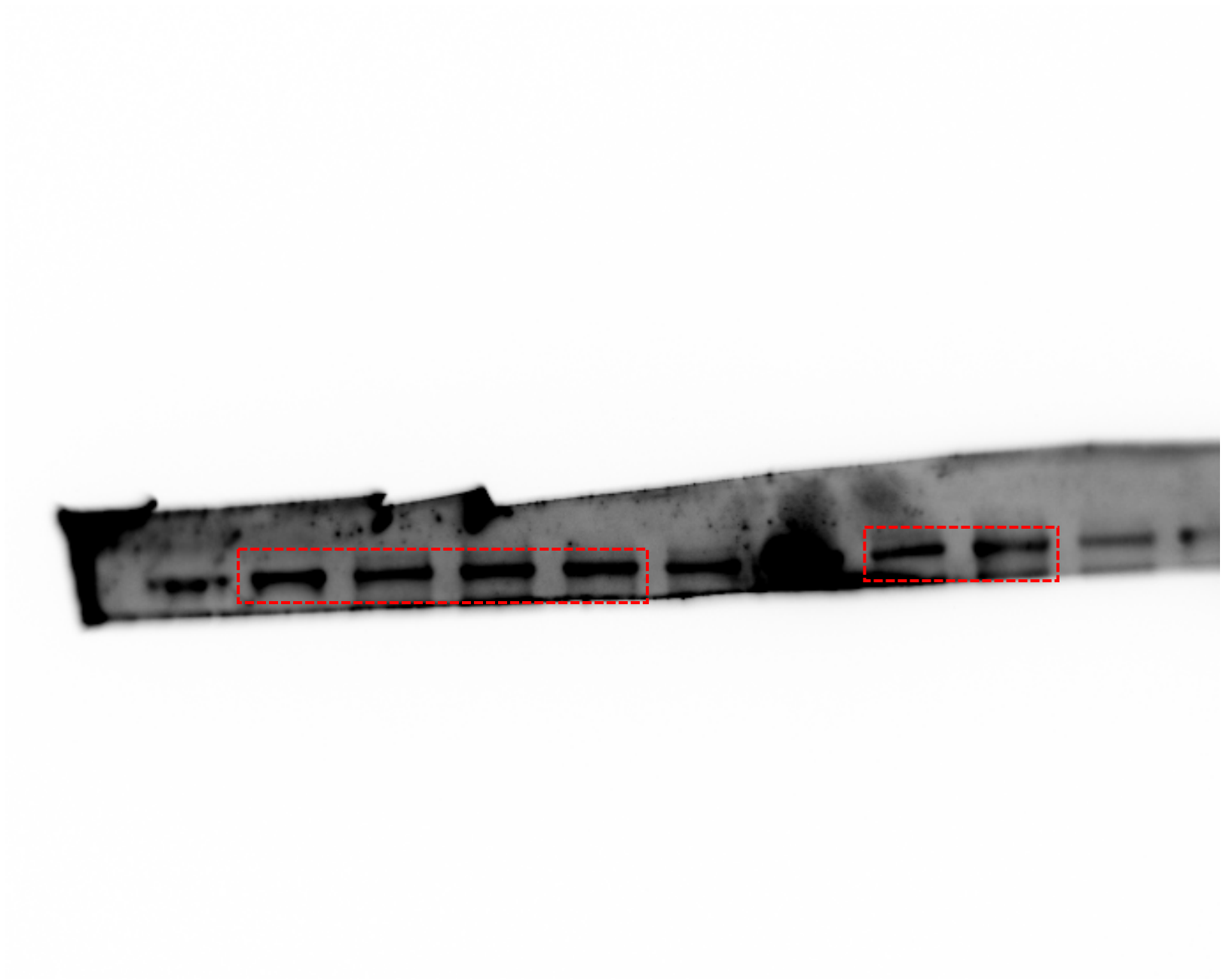


Figure 6.(D) Integrated transcriptomic profiling and proteomic verification reveal key adipogenic pathways underlying marbling grade differences (A1 vs A4) in longissimus dorsi muscle of Woking black cattle

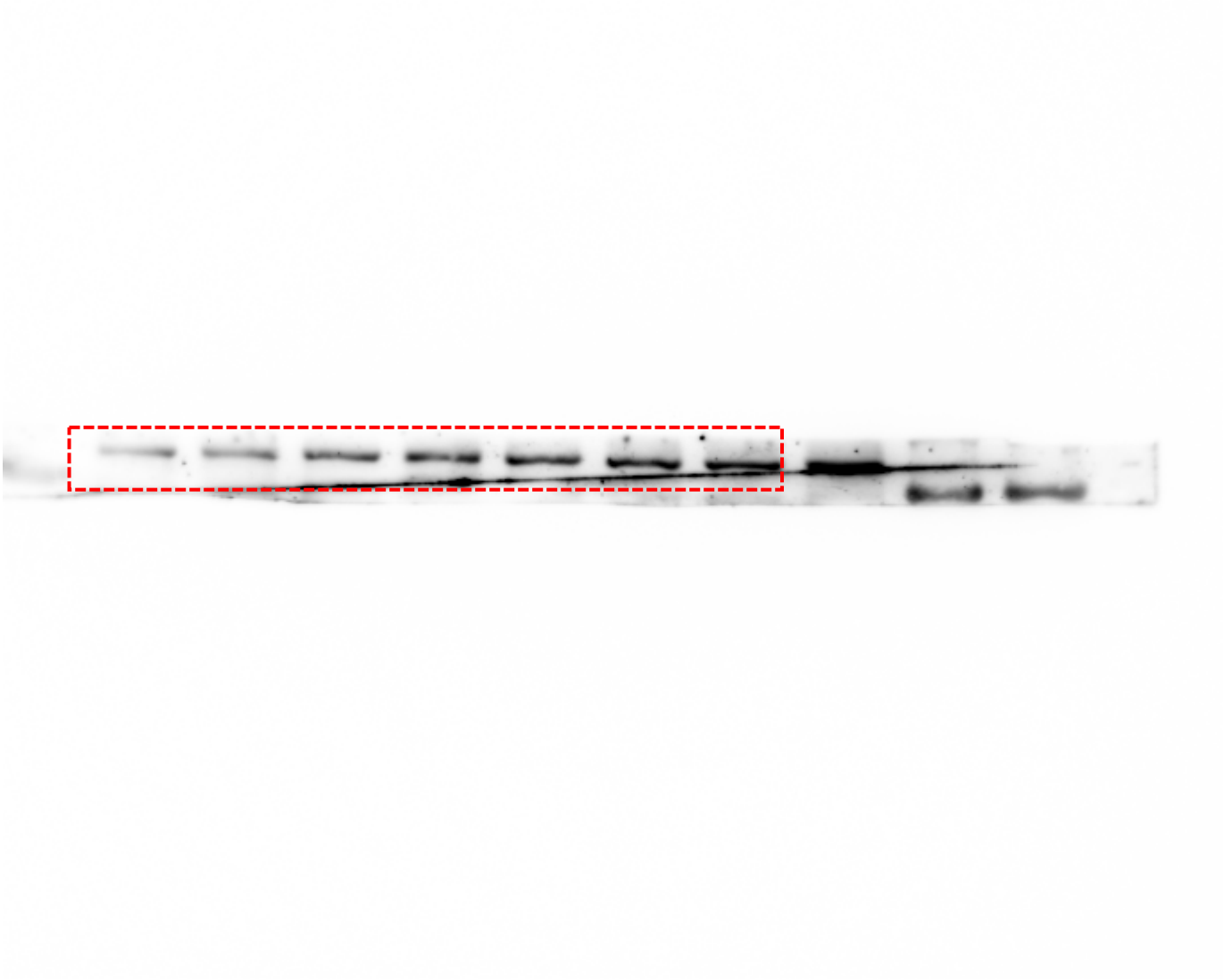


m-TOR

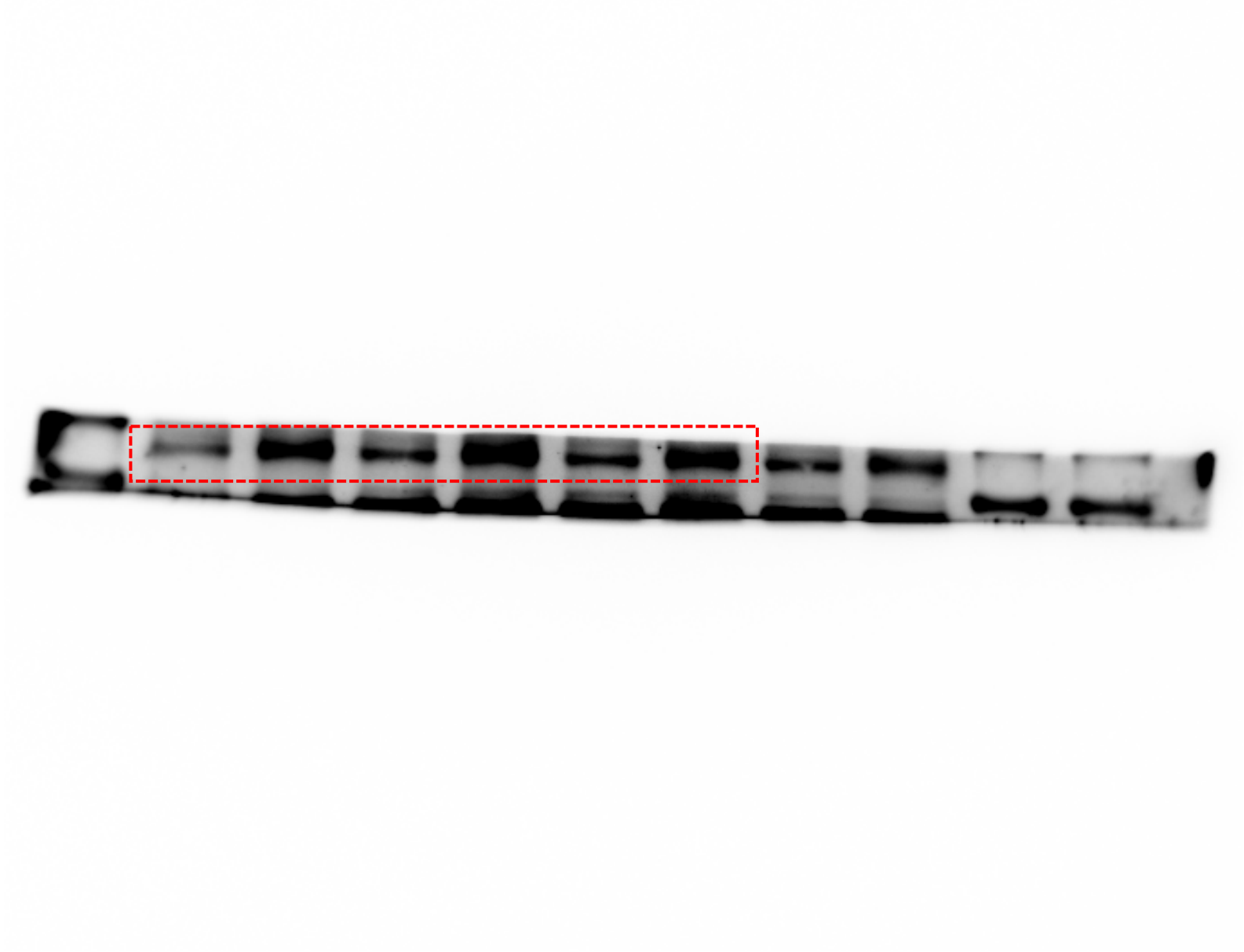




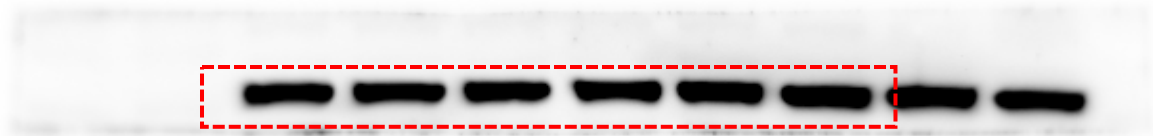
AMPK



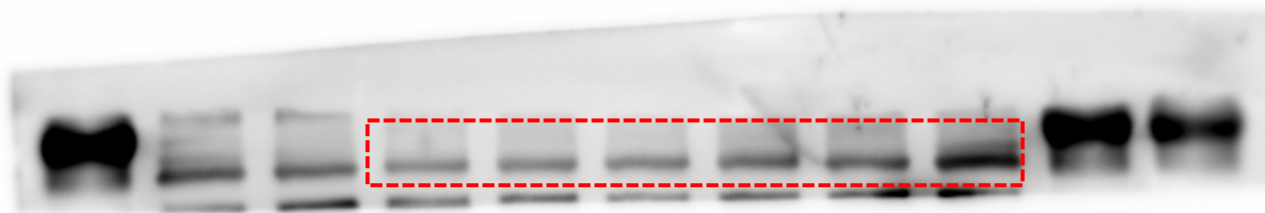
P-AMPK



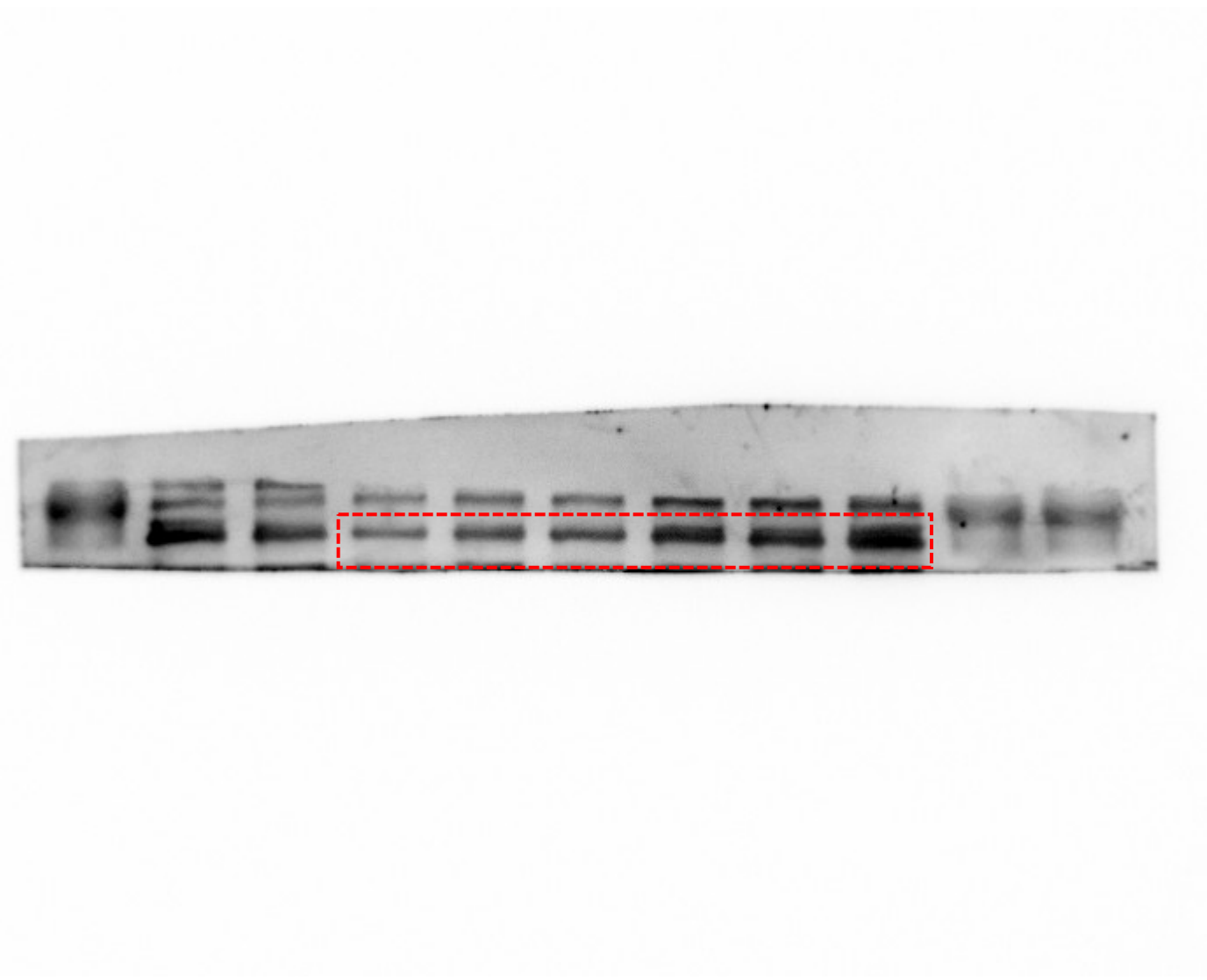
β -actin_1



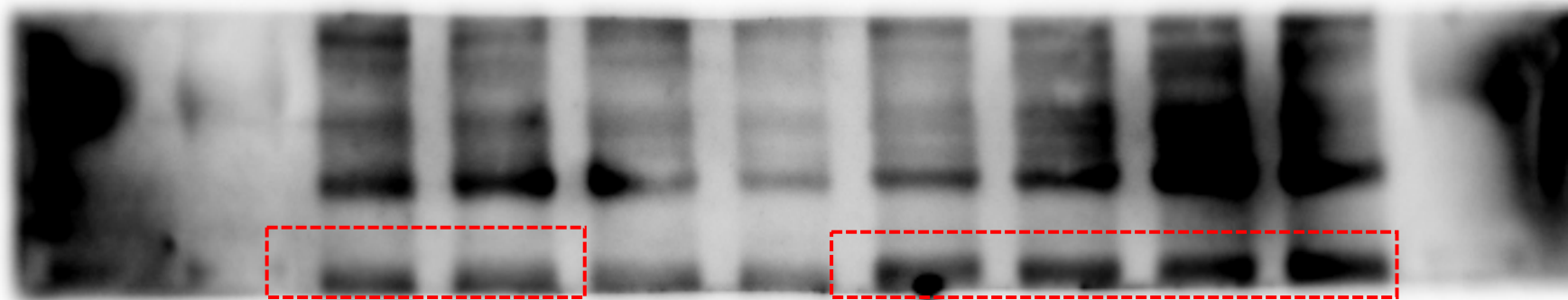
AKT



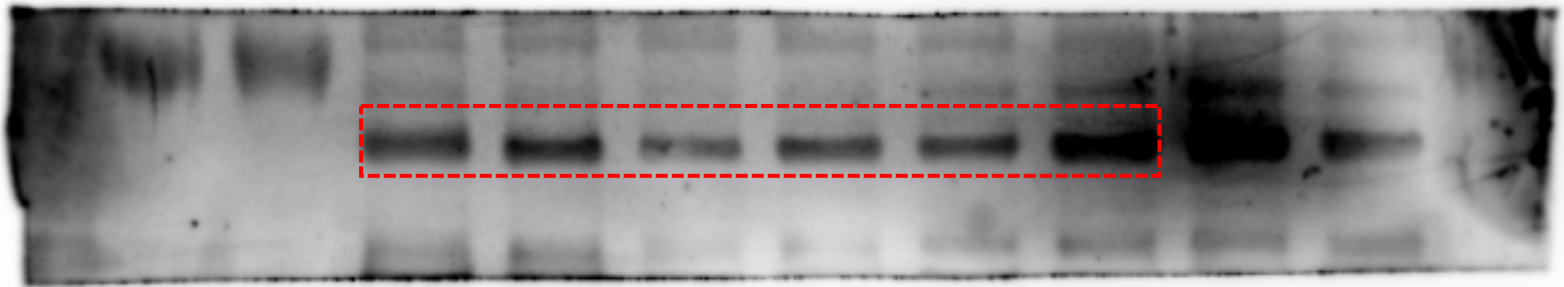
P-AKT



PI3K



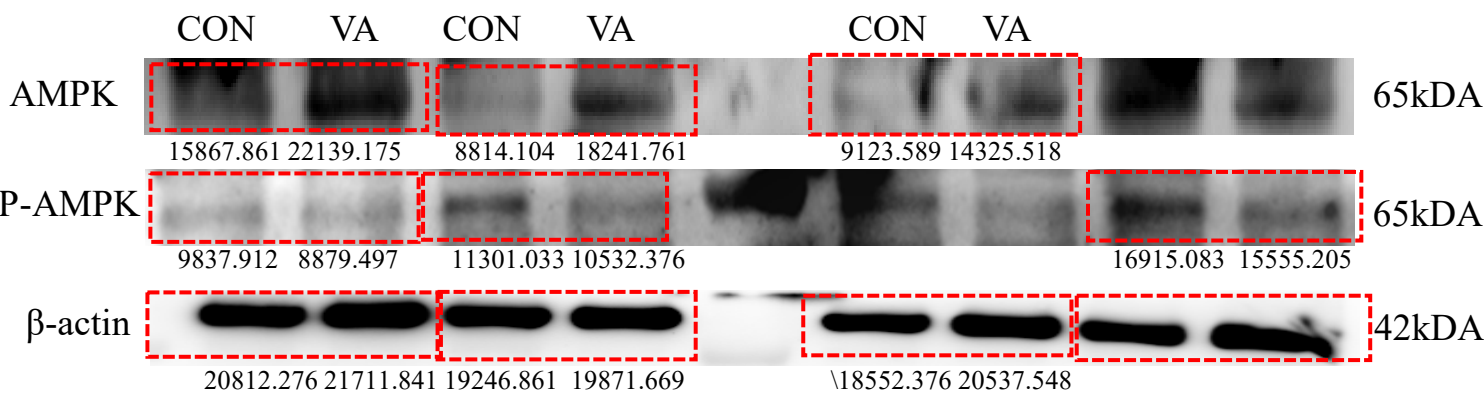
P-PI3K



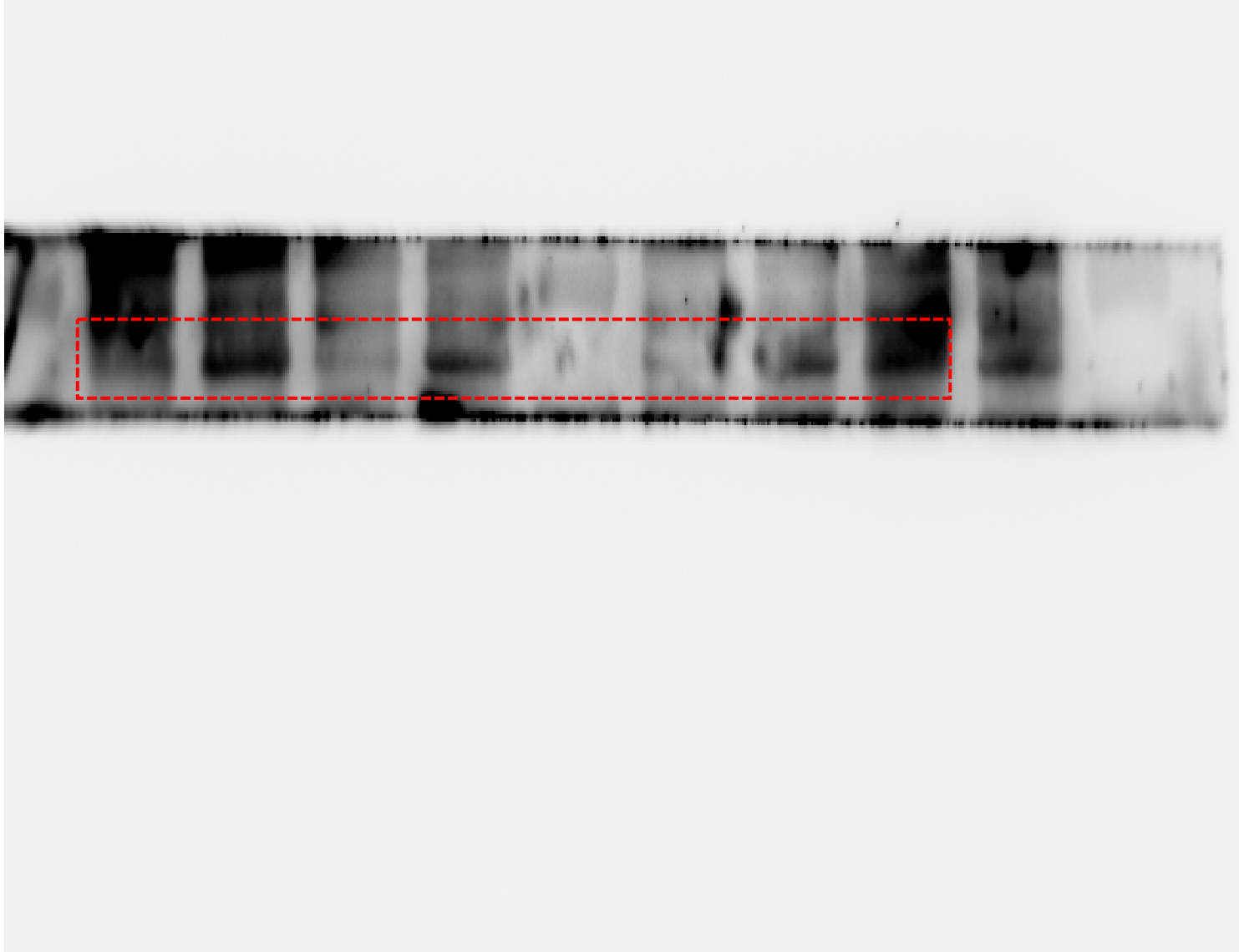
β -actin_2



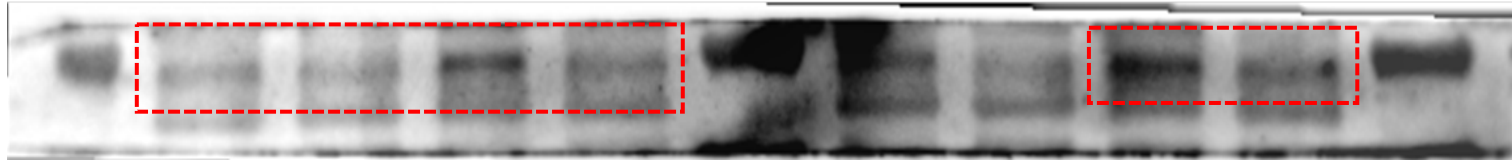
Figure 6.(E) Integrated transcriptomic profiling and proteomic verification reveal key adipogenic pathways underlying marbling grade differences (A1 vs A4) in longissimus dorsi muscle of Woking black cattle



AMPK



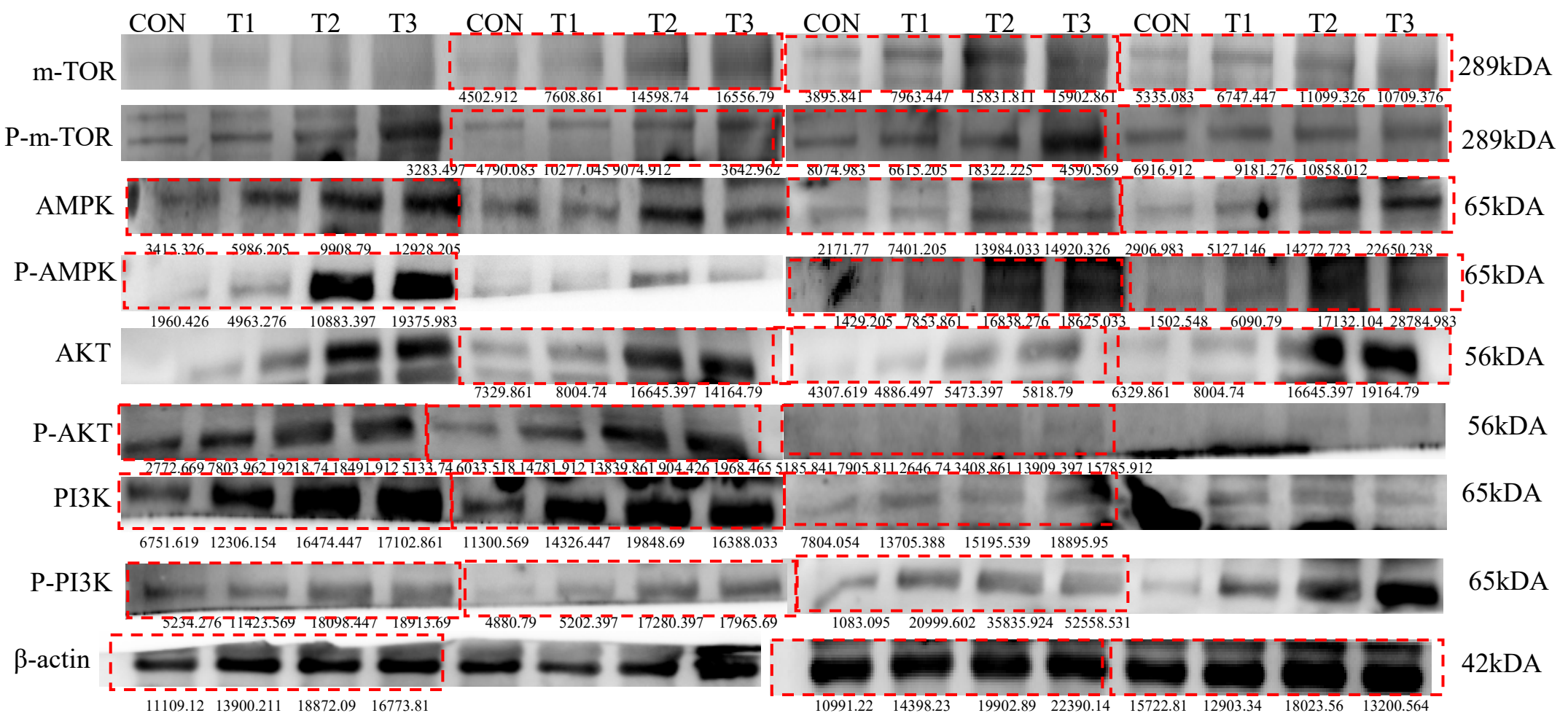
AMPK



β -actin

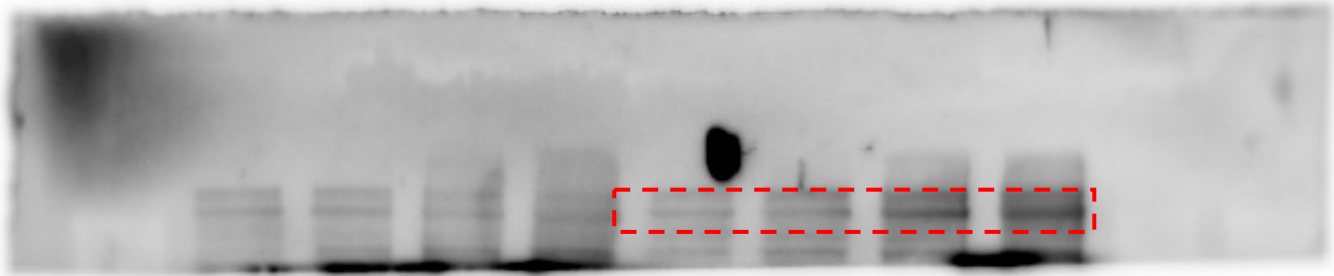


Figure 7. ATRA activates adipogenic pathways to promote triglyceride accumulation and marker expression in BSMCs of Woking black cattle.

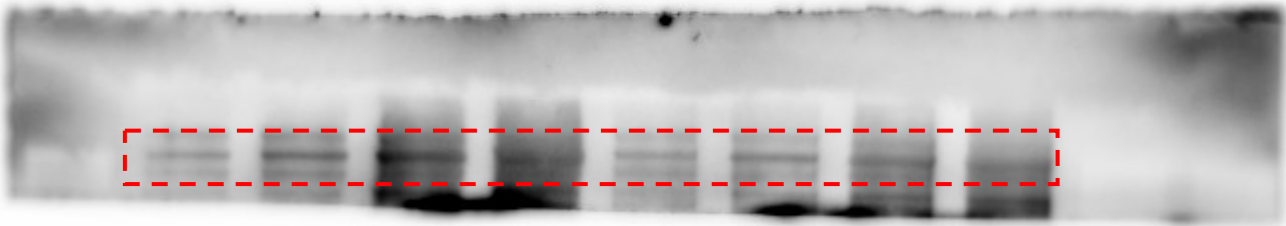


m-TOR

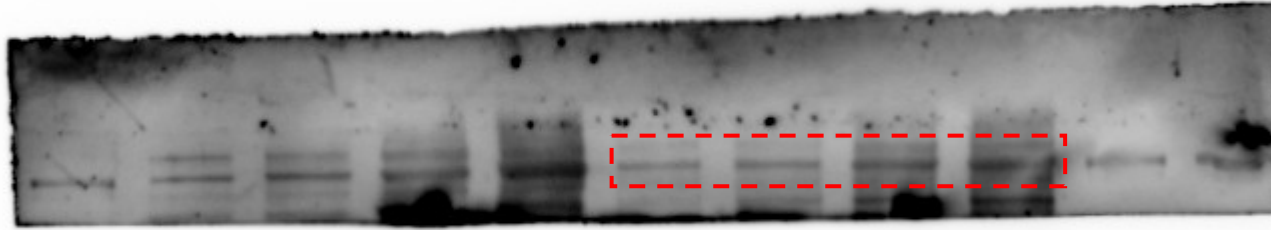
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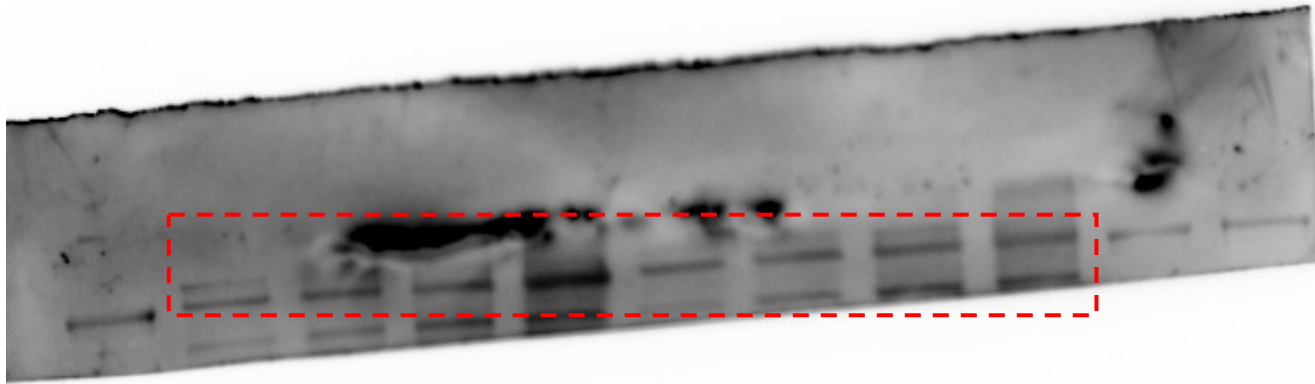
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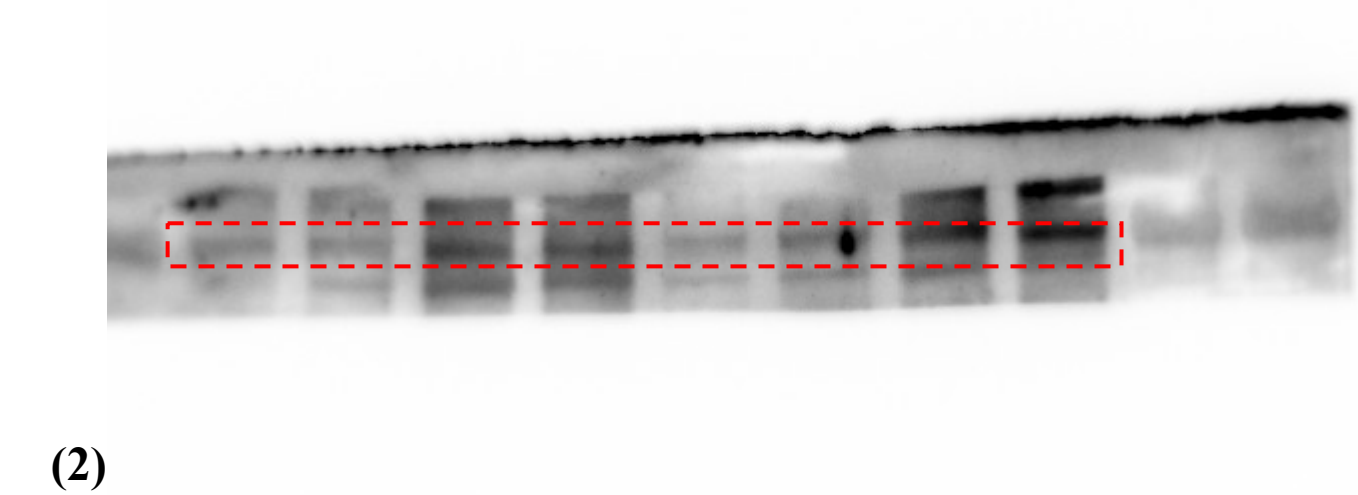
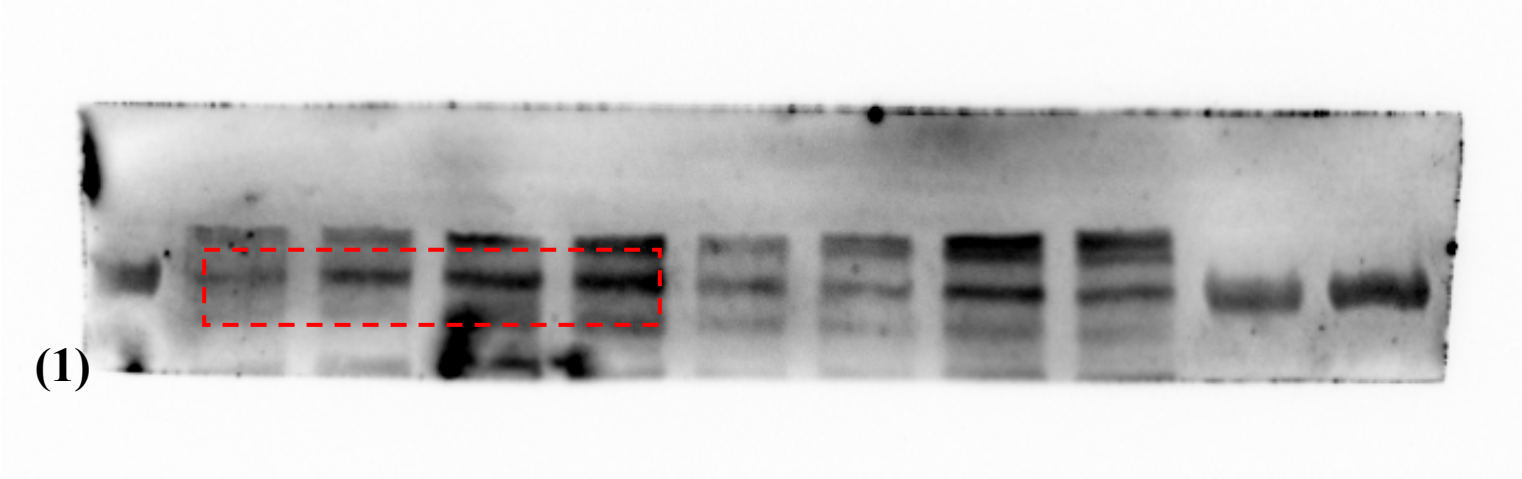
P-m-TOR



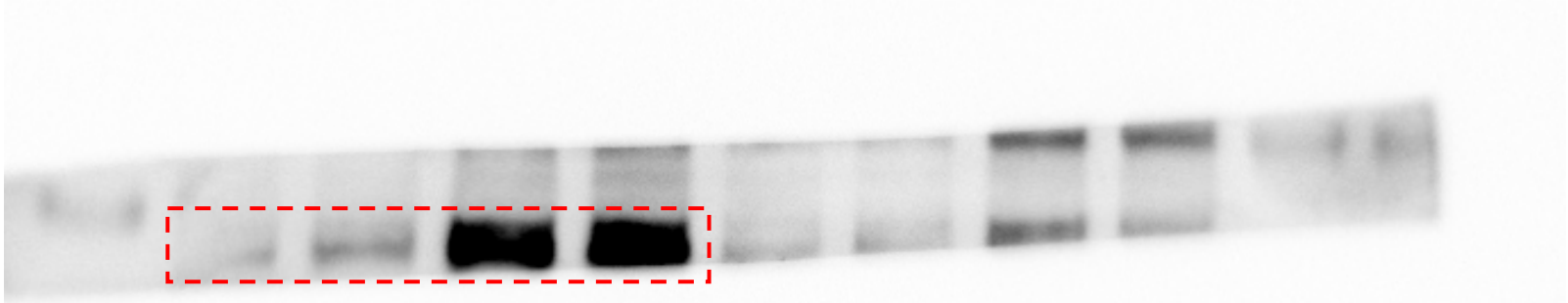
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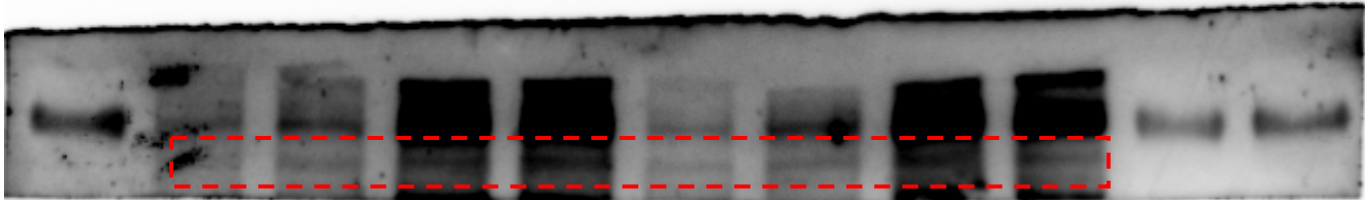
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P-AMPK

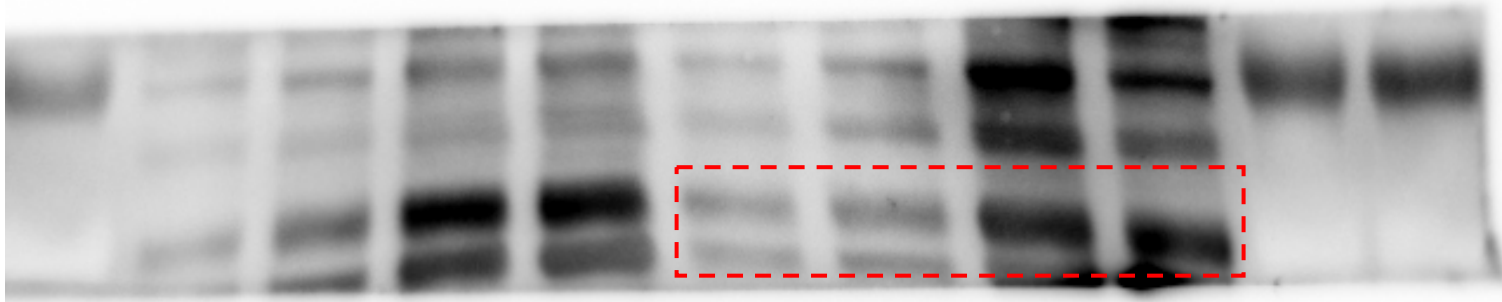


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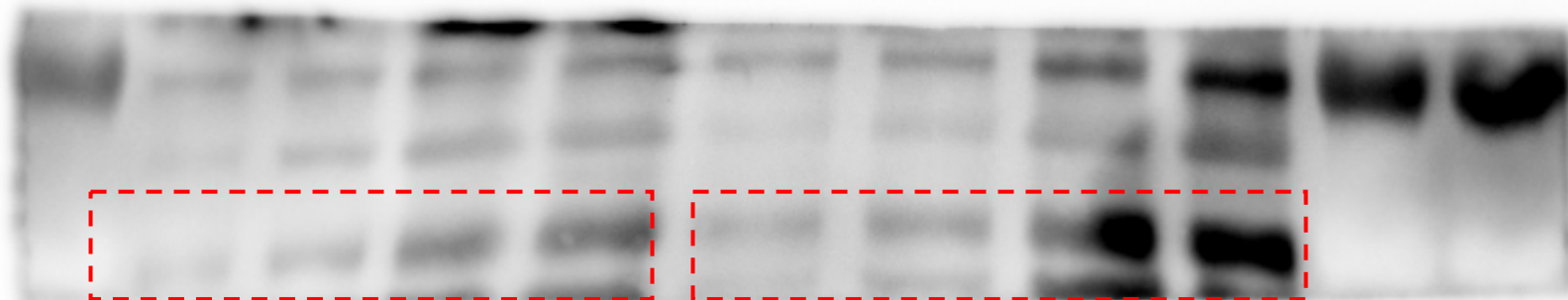


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AKT

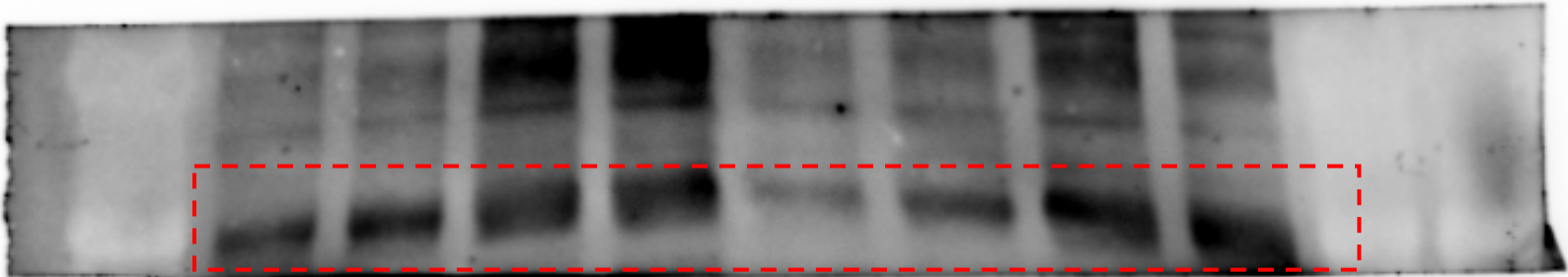


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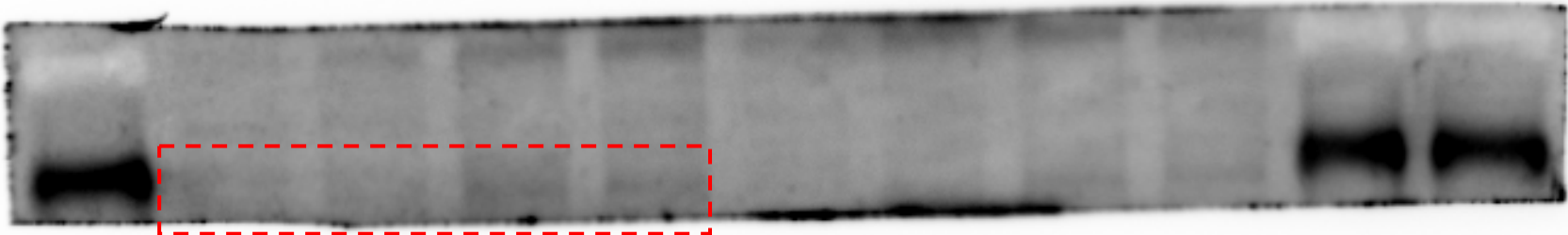


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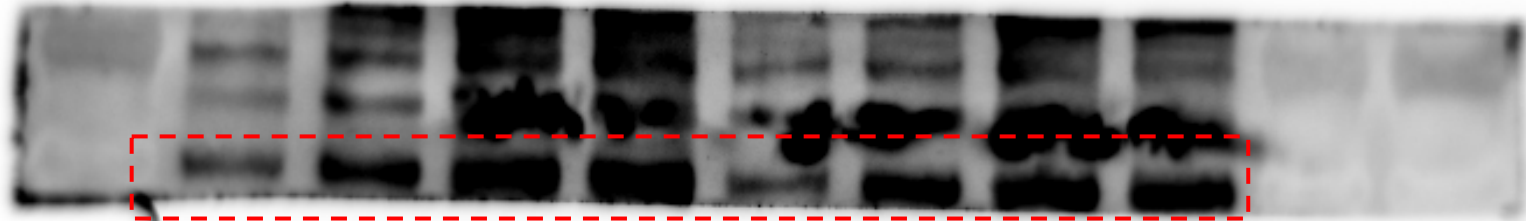


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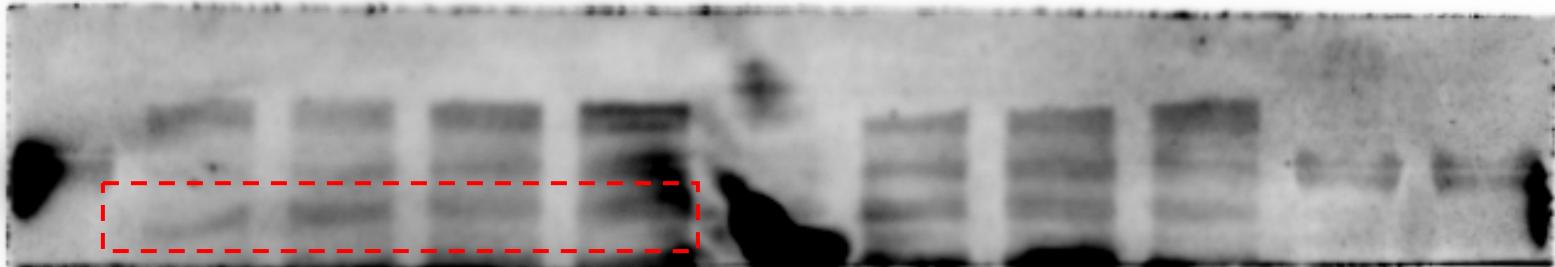


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PI3K



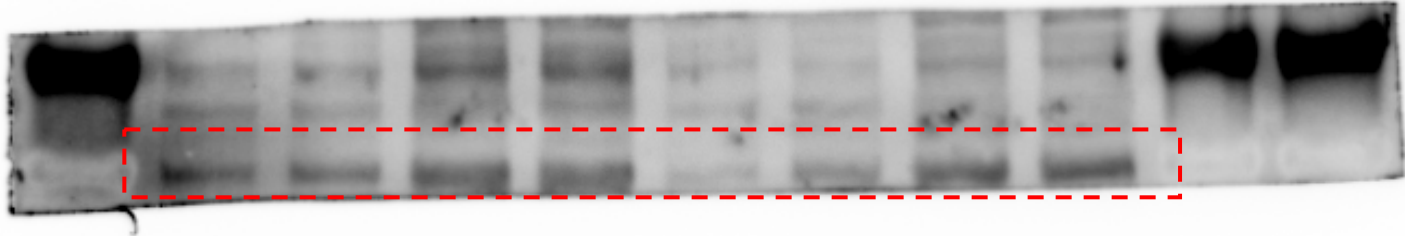
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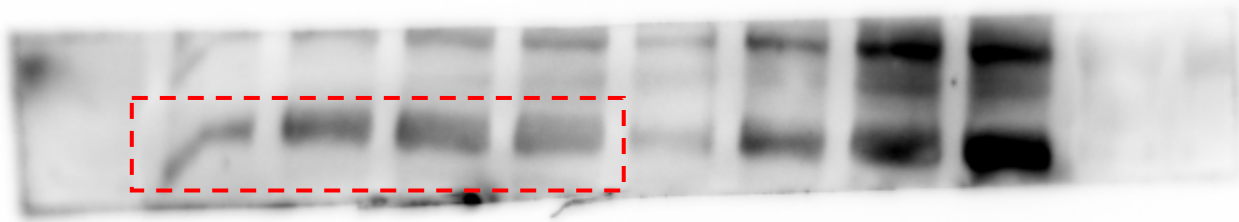
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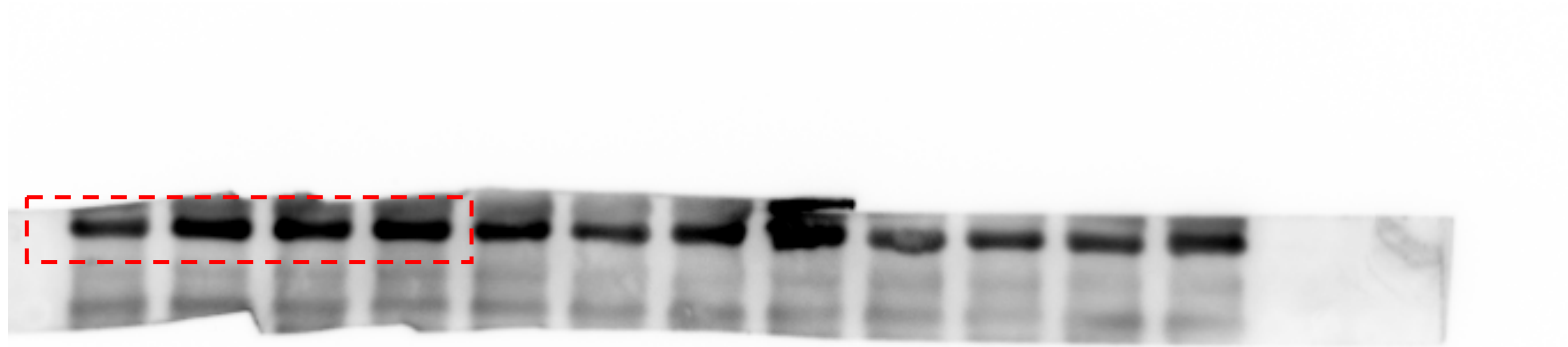
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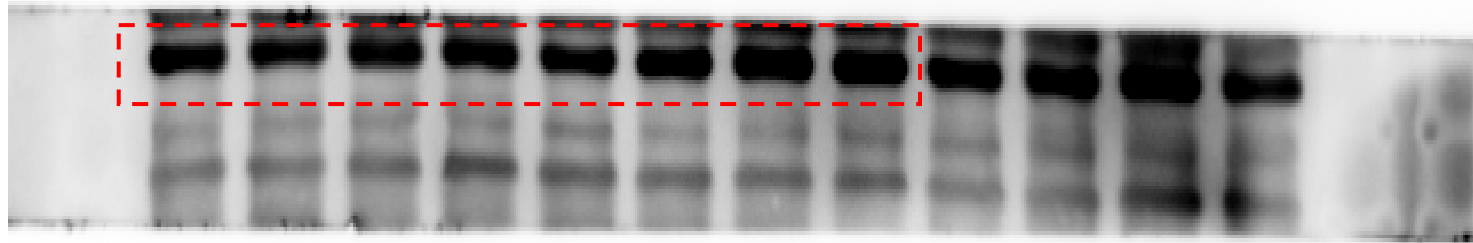
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β -actin

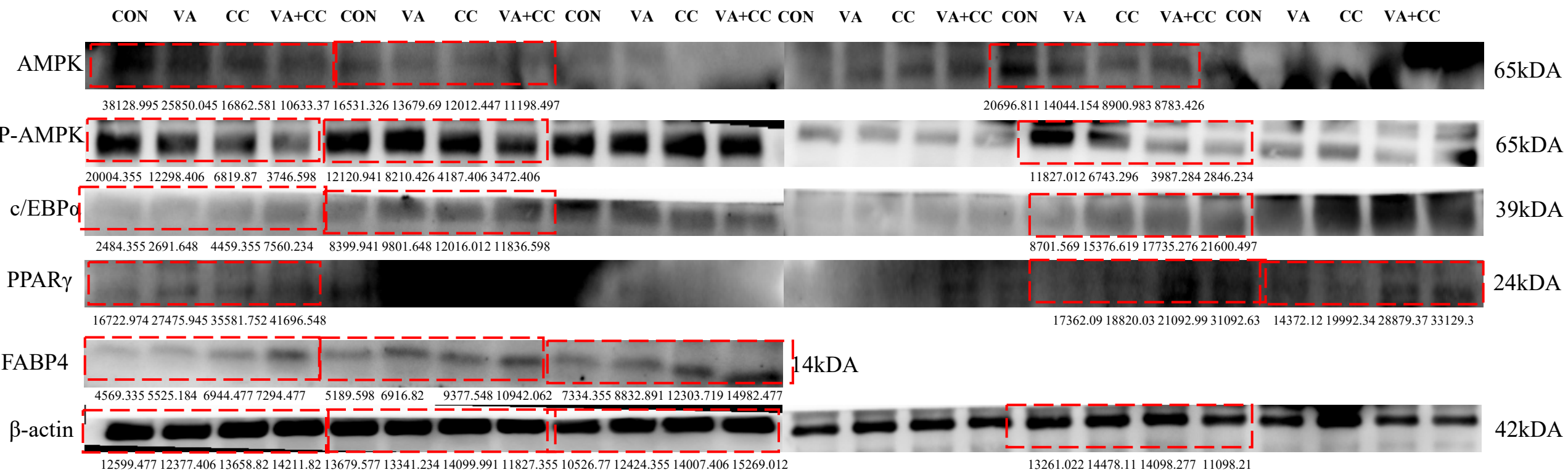


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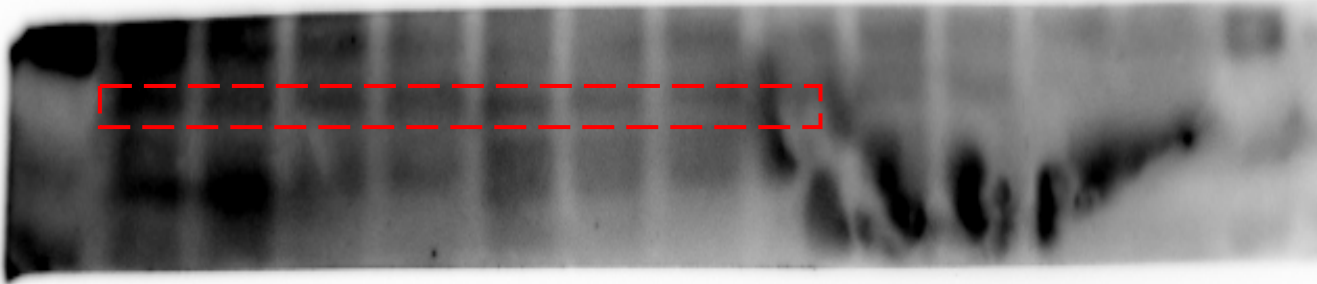
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Figure 8.(B)Pharmacological Modulation of AMPK Activity Reveals Its Exclusive Mediating Role in Vitamin A-Induced Adipogenesis in BSMCs of Woking black cattle
Evidence from Triglyceride Accumulation, Adipogenic Transcription, and Pathway Protein Expression

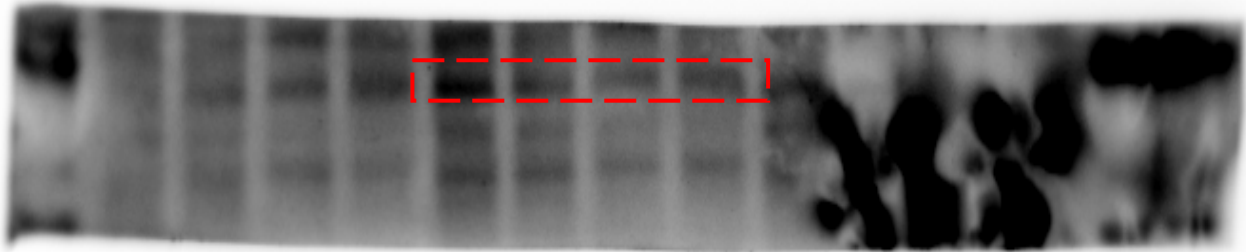


AMPK

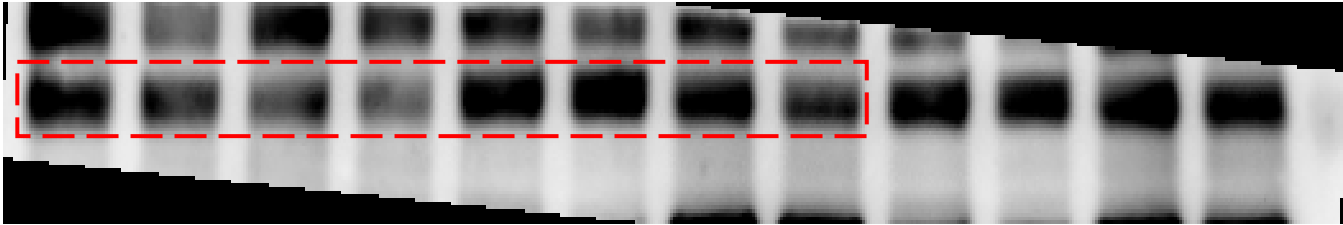
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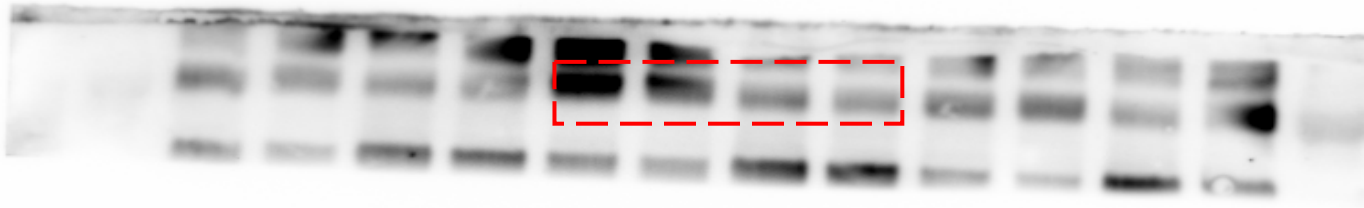
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P-AMPK



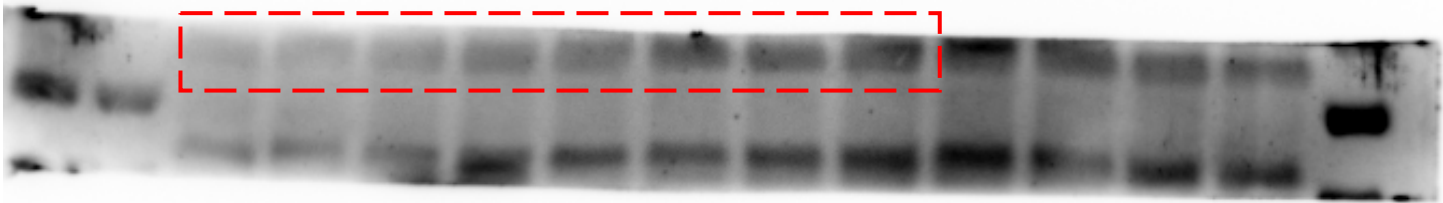
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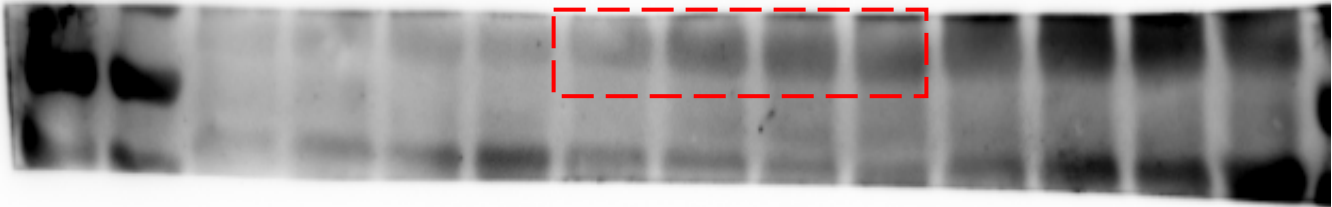
(2)

c/EBP α

(1)

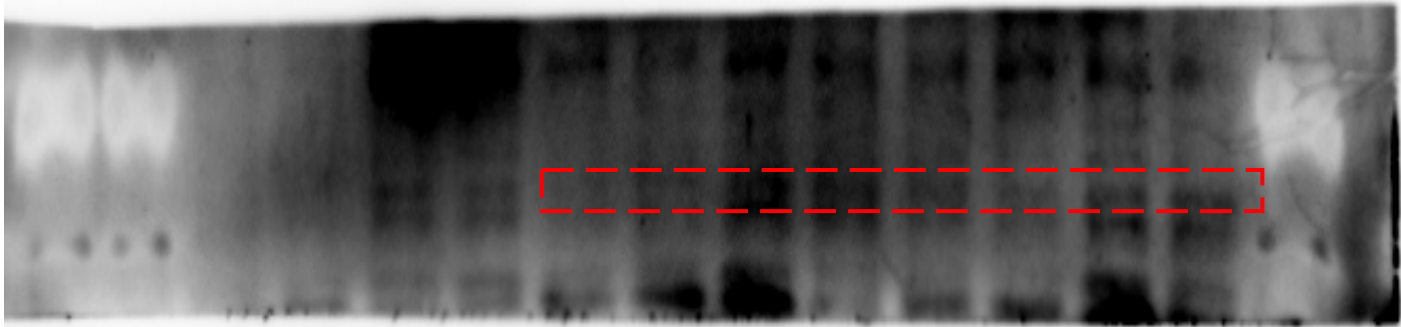


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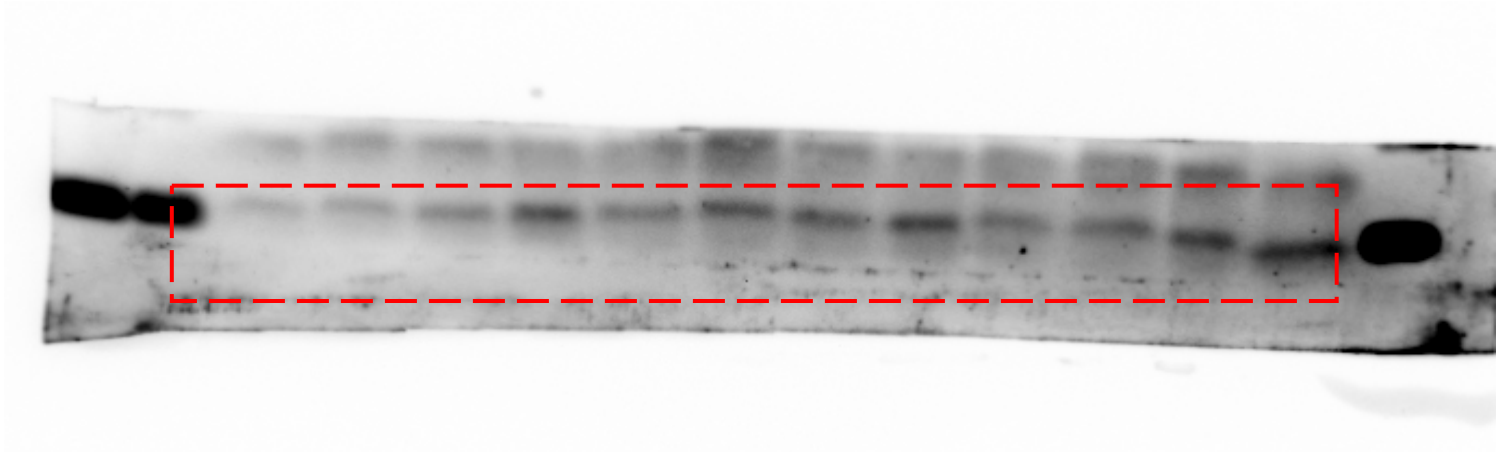


(1)



(2)

FABP4



β -actin

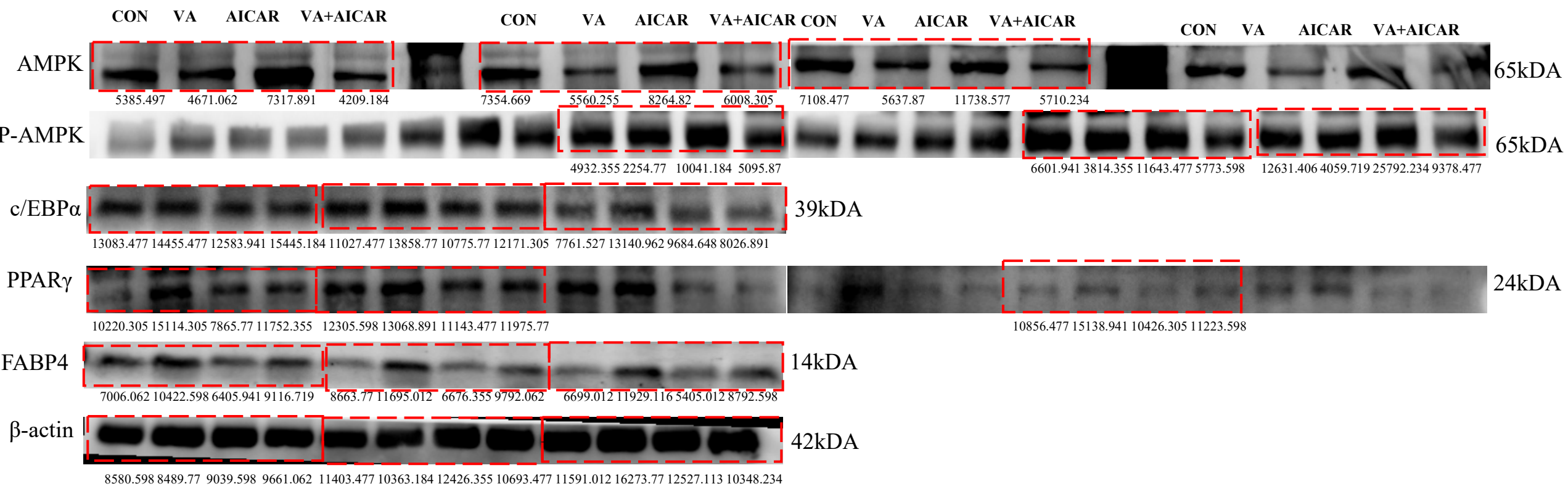


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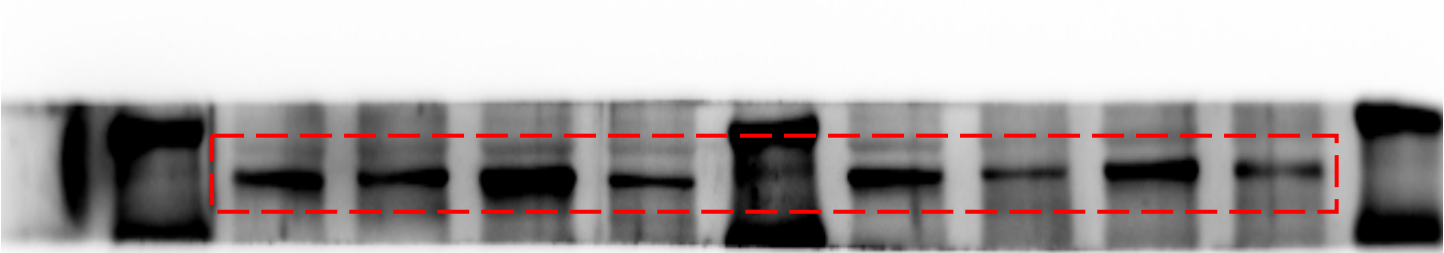
(2)

Figure 8.(D)Pharmacological Modulation of AMPK Activity Reveals Its Exclusive Mediating Role in Vitamin A-Induced Adipogenesis in BSMCs of Woking black cattle
Evidence from Triglyceride Accumulation, Adipogenic Transcription, and Pathway Protein Expression

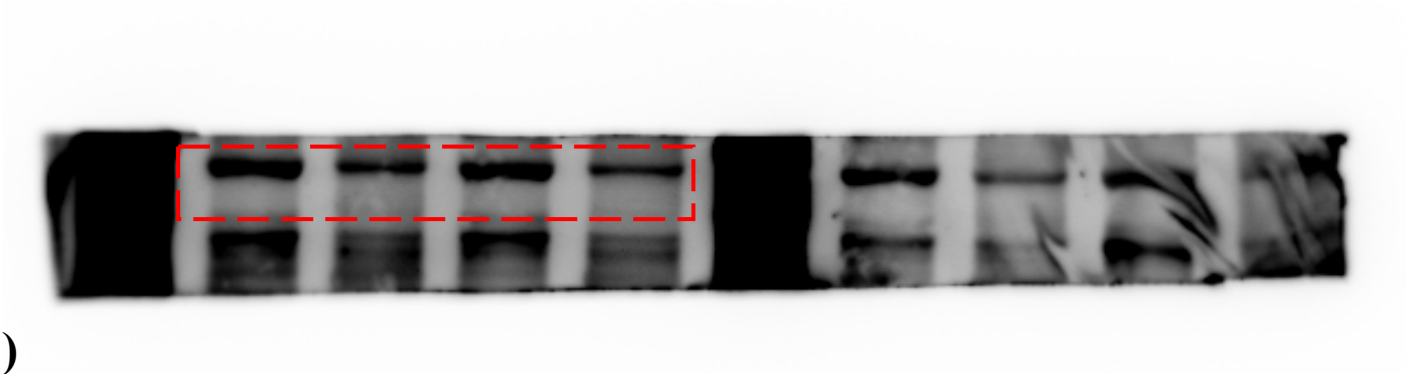


AMPK

(1)

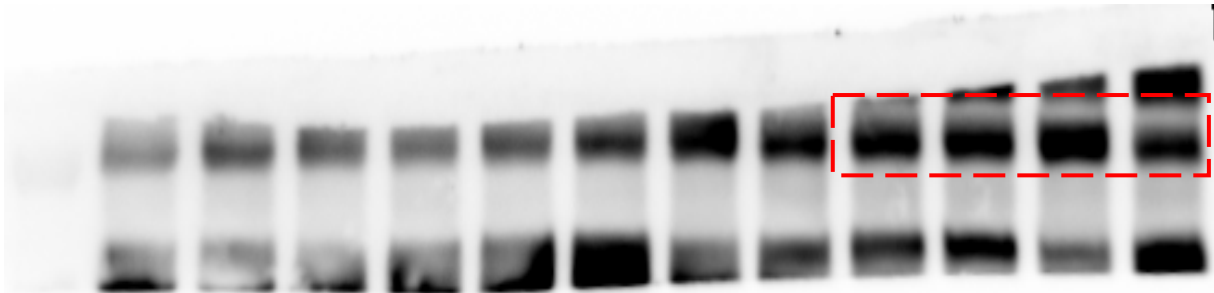


(2)

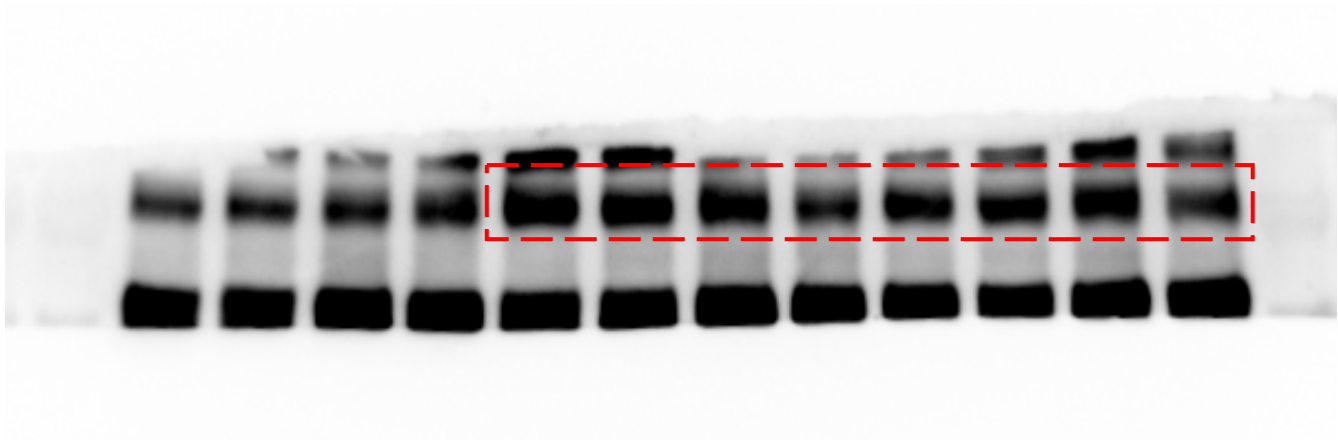


P-AMPK

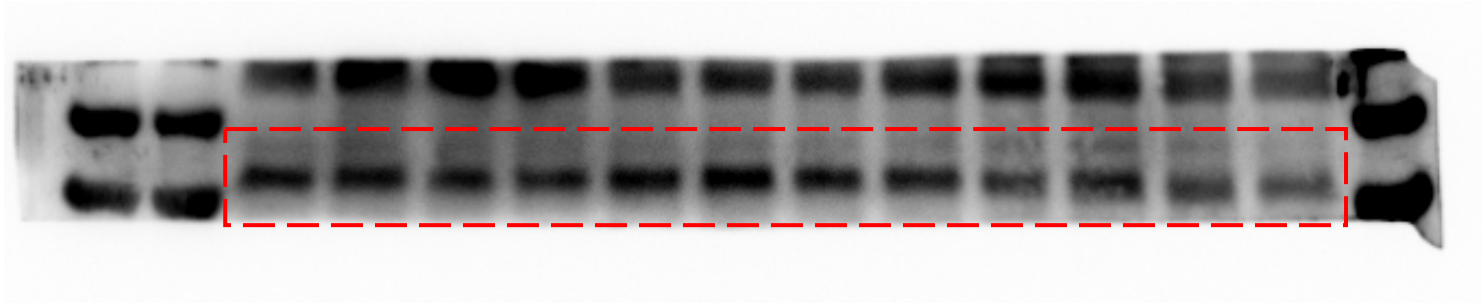
(1)



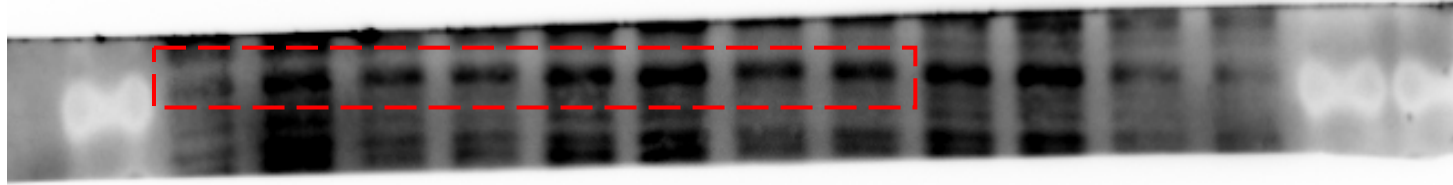
(2)



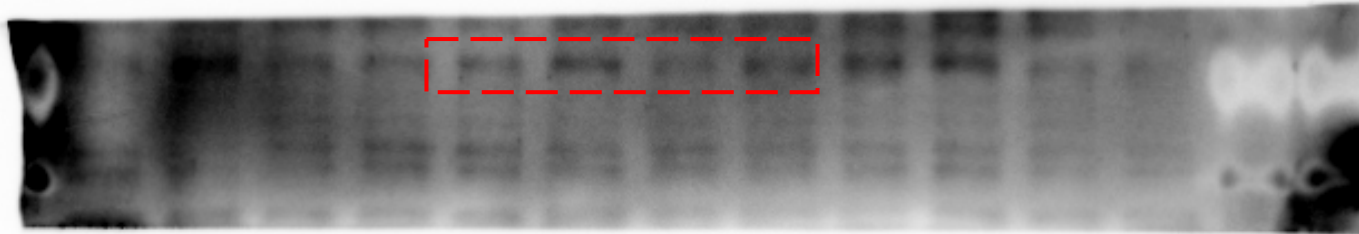
c/EBP α



PPAR γ

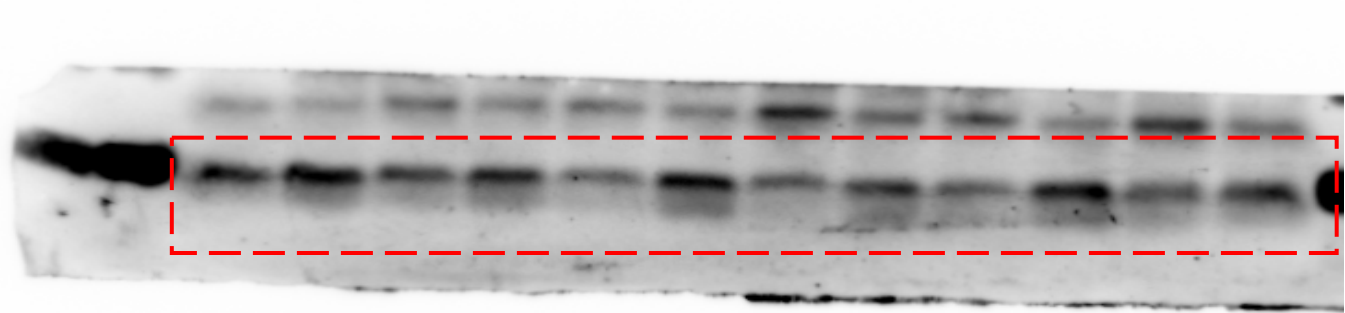


(1)



(2)

FABP4



β -actin

