

Supplementary Information

Scopolin ameliorates high-fat diet induced hepatic steatosis in mice: potential involvement of SIRT1-mediated signaling cascades in the liver

Ahyoung Yoo¹, Vikram P. Narayan¹, Eun Young Hong², Wan Kyunn Whang², and Taesun Park^{1,*}

¹Department of Food and Nutrition, Brain Korea 21 PLUS Project, Yonsei University, 50 Yonsei-ro, Seodaemun-gu, Seoul 03722, South Korea

²Pharmaceutical Botany Laboratory, College of Pharmacy, Chung-Ang University, Heukseok-dong, Dongjak-gu, Seoul 06974, South Korea

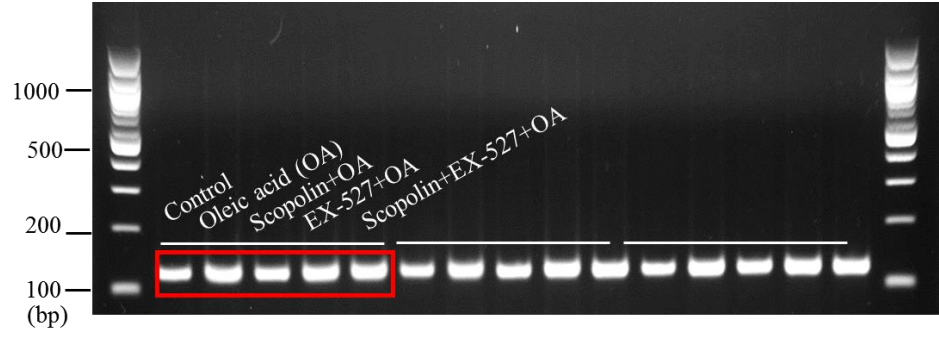
***Corresponding author:** Taesun Park, Department of Food and Nutrition, Yonsei University, 50 Yonsei-ro, Seodaemun-gu, Seoul 03722, South Korea

E-mail address: tspark@yonsei.ac.kr; Tel.: +82-2-2123-3123; Fax: +82-2-365-3118

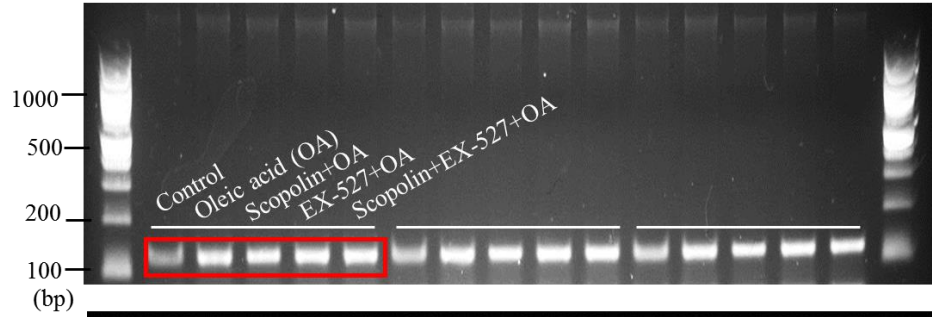
Supplementary Table 1. Primer sequences used for semi-quantitative RT-PCR analysis

Gene description	Primers	Sequences (5'→3')	Annealing temperature (°C)	PCR product (bp)
Liver X receptor α (LXR α)	F R	TCCTACACGAGGATCAAGCG AGTCGCAATGCAAAGACCTG	55	119
Sterol regulatory element-binding factor 1c (SREBP1c)	F R	ATCGCAAACAAGCTGACCTG AGATCCAGGTTTGAGGTGGG	55	115
Acetyl-CoA carboxylases (ACC)	F R	GCCATTGGTATTGGGGCTTAC CCCACCAAGGACTTTGTTG	55	119
Lipoprotein lipase (LPL)	F R	ACTTGTCATCTCATTCTGG GCACCCAACCTCTCATAATT	55	166
Fatty acid synthase (FAS)	F R	AGGTATGGCCACTTTGGGAC GCTGGTCTTGCTGTGCATCT	55	103
Adiponectin receptor 2 (AdipoR2)	F R	ATGGTGGCGCTTTTCTCTGG GCACAGGTCTTGCAAATGGC	55	136
Sirtuin 1 (SIRT1)	F R	AGCTCCTTGGAGACTGCGAT TGGGCGTGGAGGTTTTTCAG	55	122
Peroxisome proliferator-activated receptor alpha (PPAR α)	F R	TGGGGATGAAGAGGGCTGAG ACGCAACGTAGAGTGCTGTG	55	197
Carnitine palmitoyltransferase 1 (CPT1)	F R	GCCACCCAGAGGAGATTGAT CCCAGGACTGGTTCATCCTT	55	110
Monocyte chemoattractant protein-1 (MCP-1)	F R	GGGCAAGCTAGGCTGTGTTT TAGCCACTCCTGGGAGCAAA	55	197
Tumor necrosis factor-alpha (TNF α)	F R	CCCTCAGCAAACCACCAAGT ACAAGGTACAACCCATCGGC	55	128
Interleukin-6 (IL-6)	F R	TCCAGTTGCCTTCTTGGGAC ACAGGTCTGTTGGGAGTGGT	55	105
Glyceraldehyde-3-phosphate dehydrogenase (GAPDH)	F R	CGTCTAGAAAAACCTGCCAA ATGAGCTTGACAAAGTGGTC	55	191

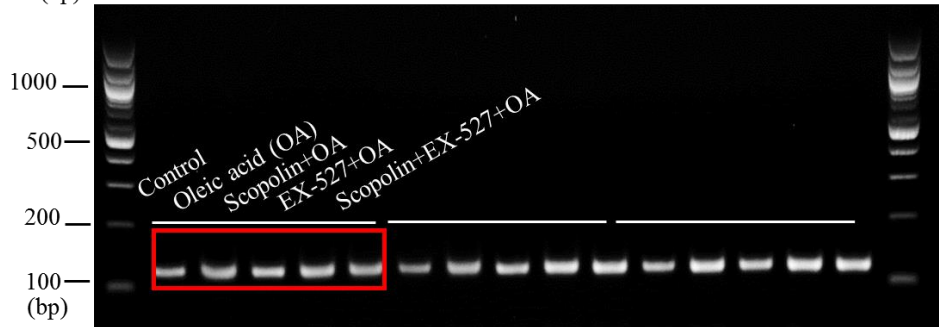
LXR α
Product size: 119



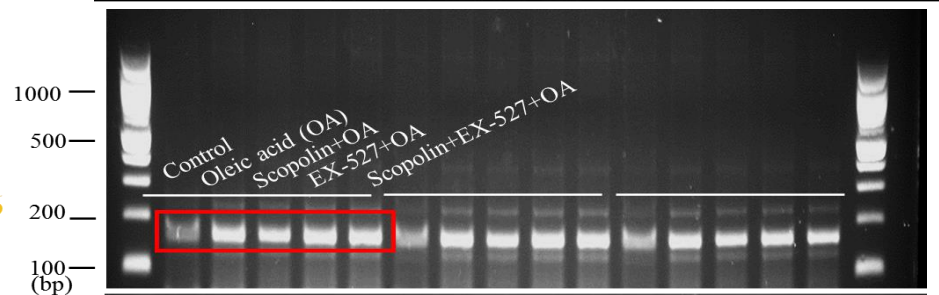
SREBP1c
Product size : 115



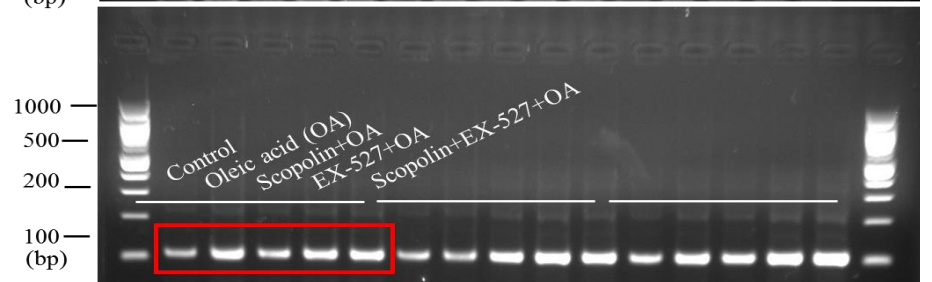
ACC
Product size : 119



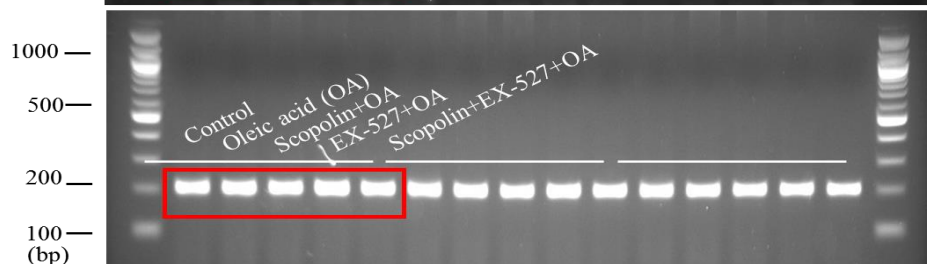
LPL
Product size : 166



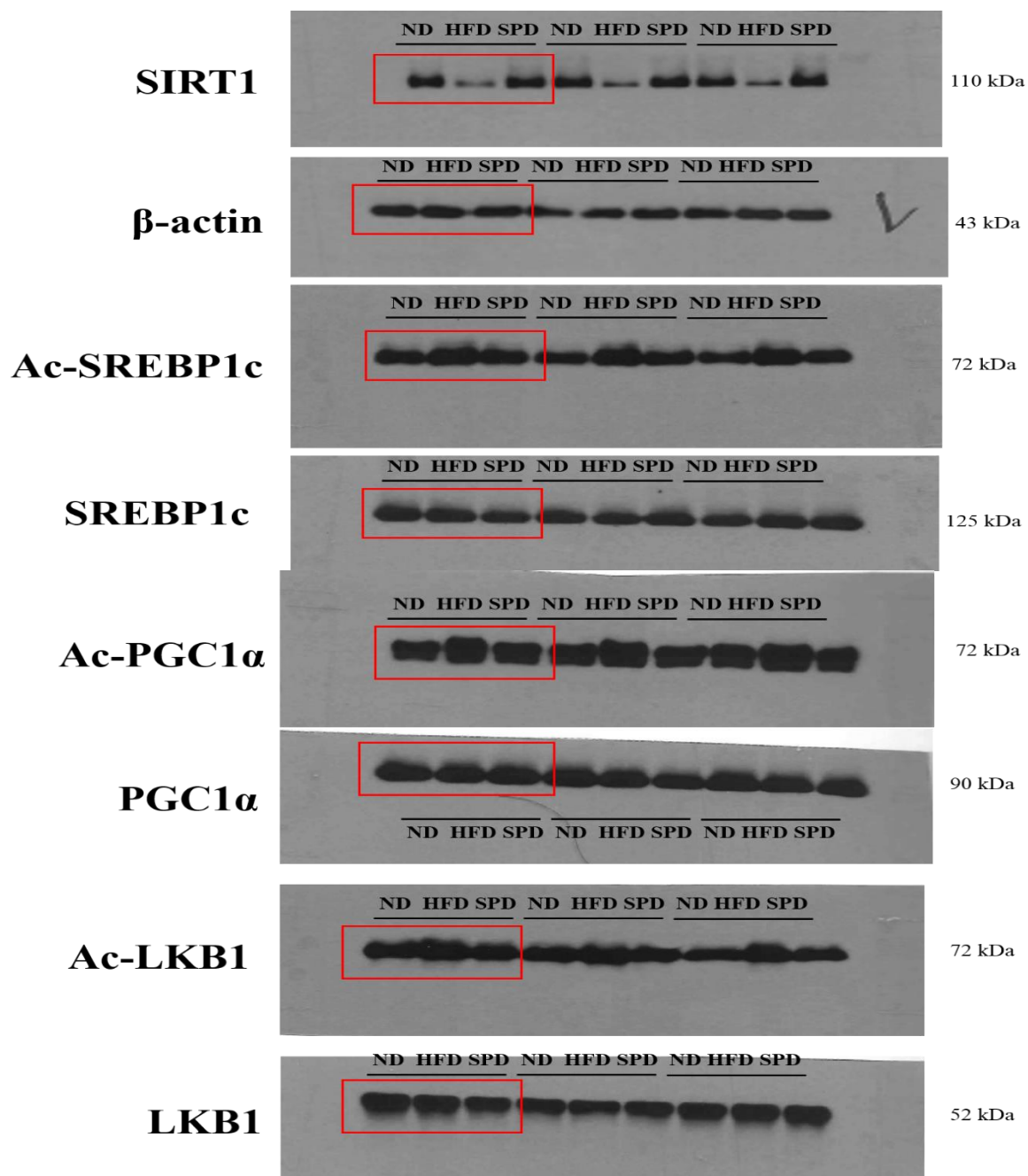
FAS
Product size : 103

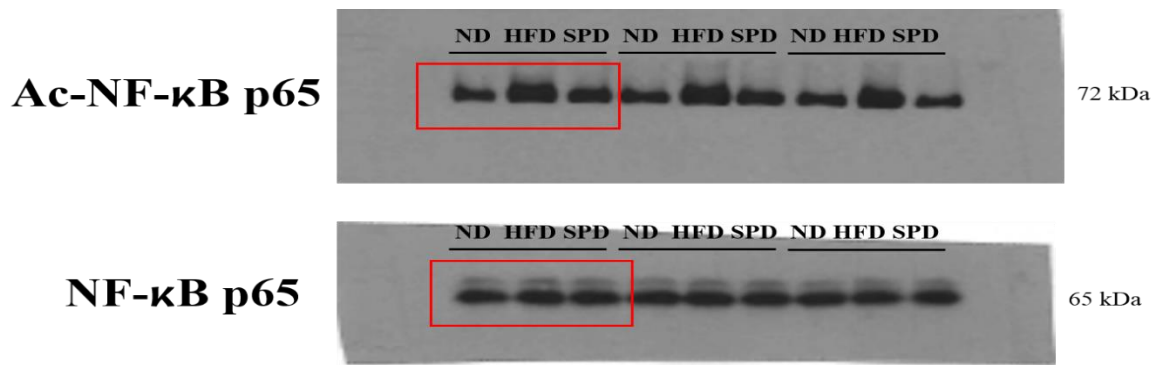


GAPDH
Product size : 191

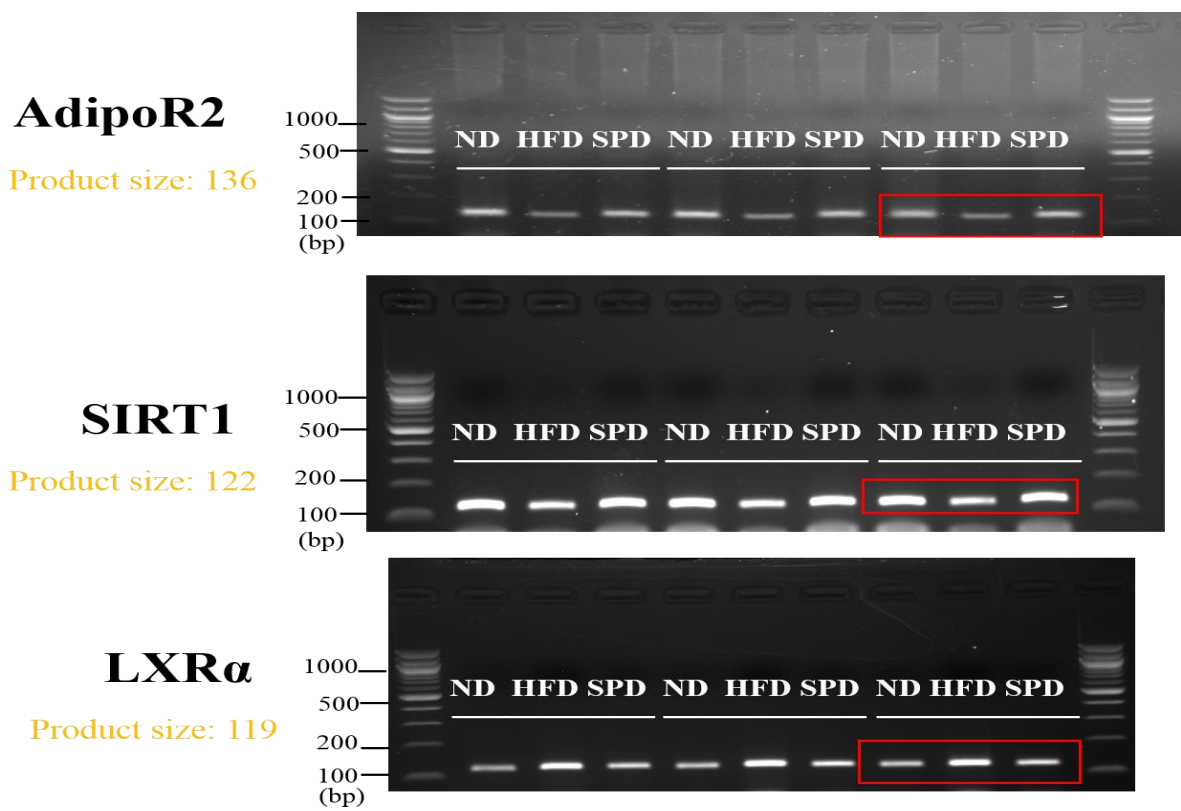


Supplementary Figure S1. Full length agarose gels relative to Fig 2C. Red boxes indicate the cropping lines used to generate the figures.

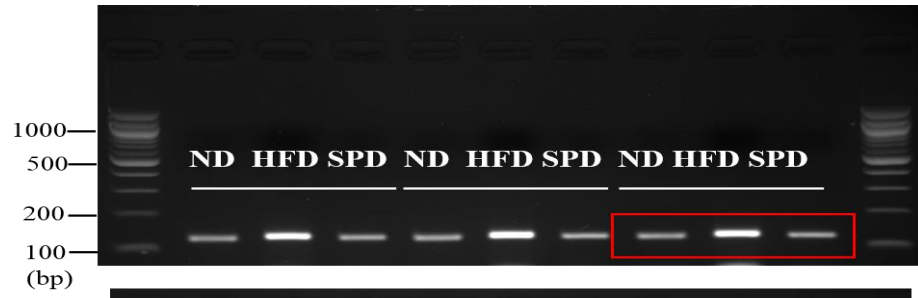




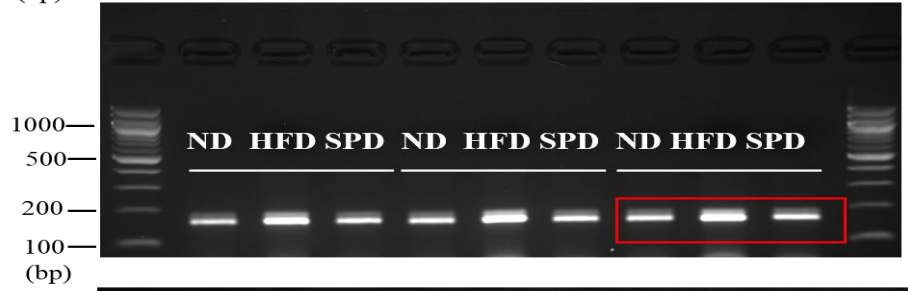
Supplementary Figure S2. Full length western blot membranes relative to Fig 5B. Red boxes indicate the cropping lines used to generate the figures.



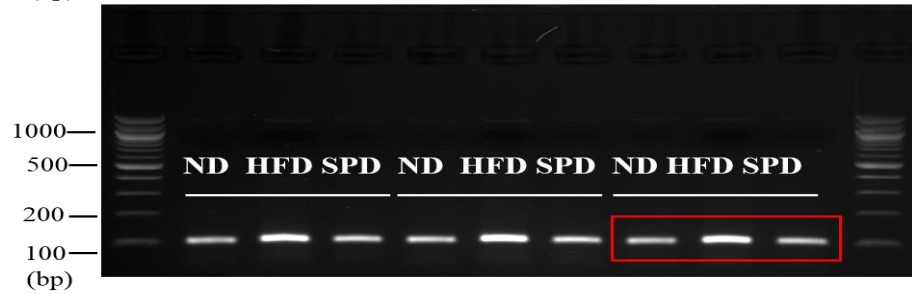
ACC
Product size: 119



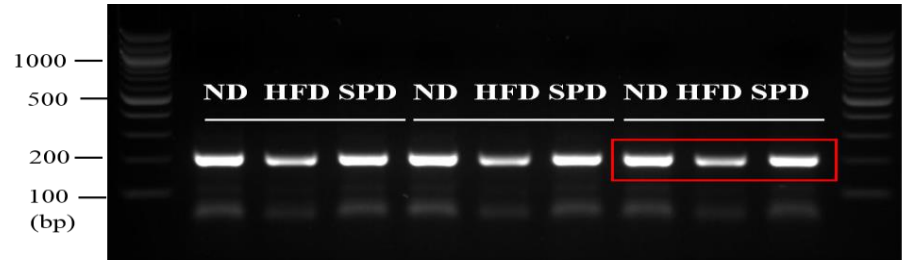
LPL
Product size: 166



FAS
Product size: 103



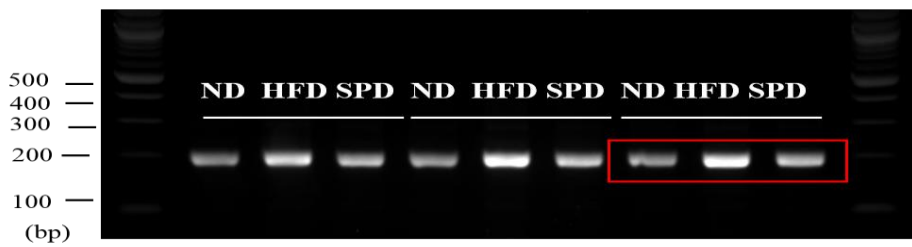
PPAR α
Product size: 197

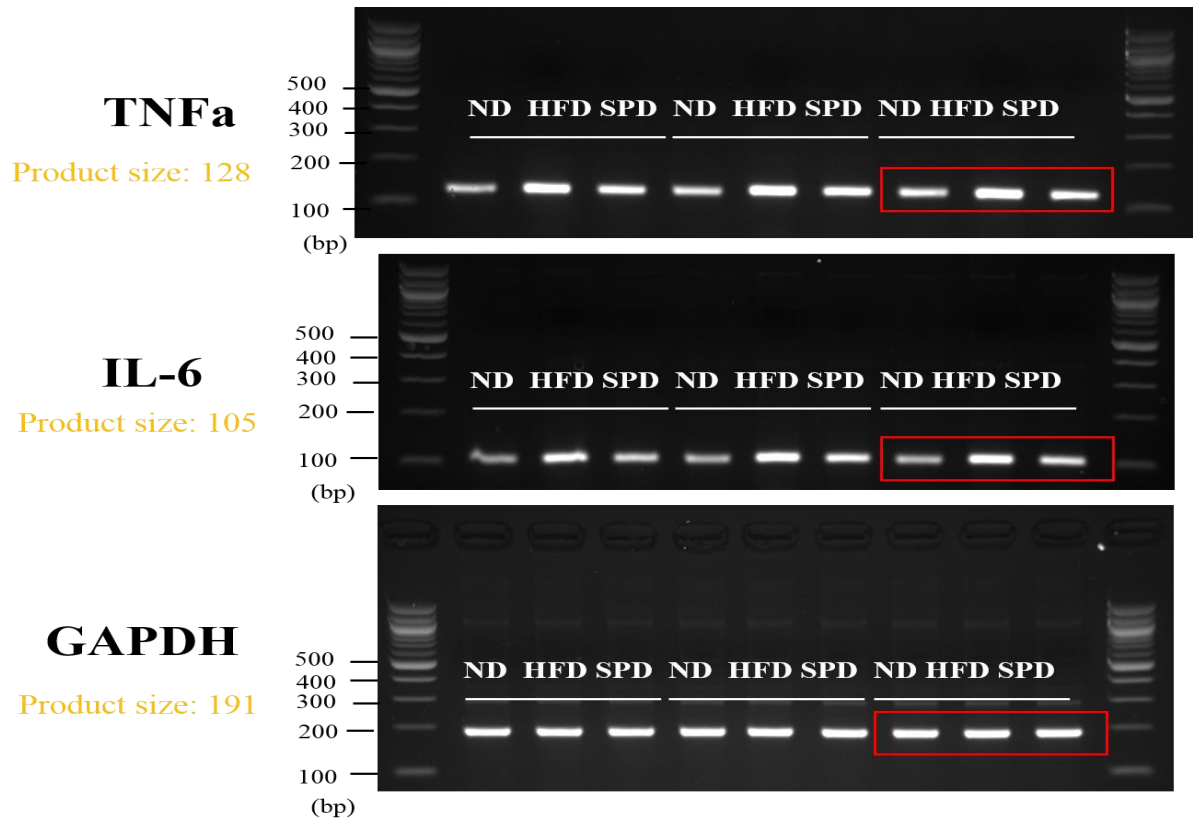


CPT1
Product size: 110

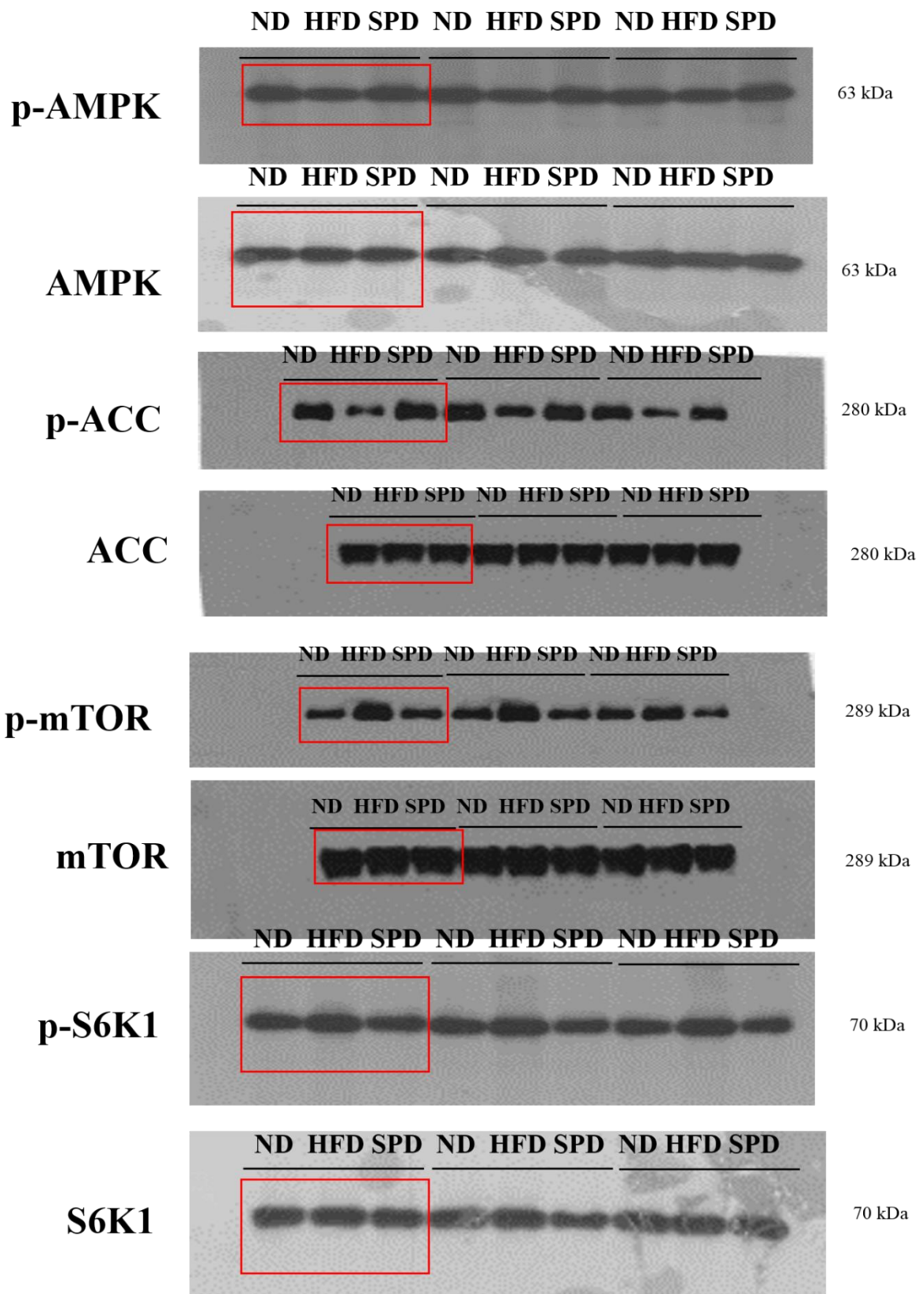


MCP-1
Product size: 197





Supplementary Figure S3. Full length agarose gels relative to Fig 5C. Red boxes indicate the cropping lines used to generate the figures.



Supplementary Figure 4S. Full length western blot membranes relative to Fig 5D. Red boxes indicate the cropping lines used to generate the figures.