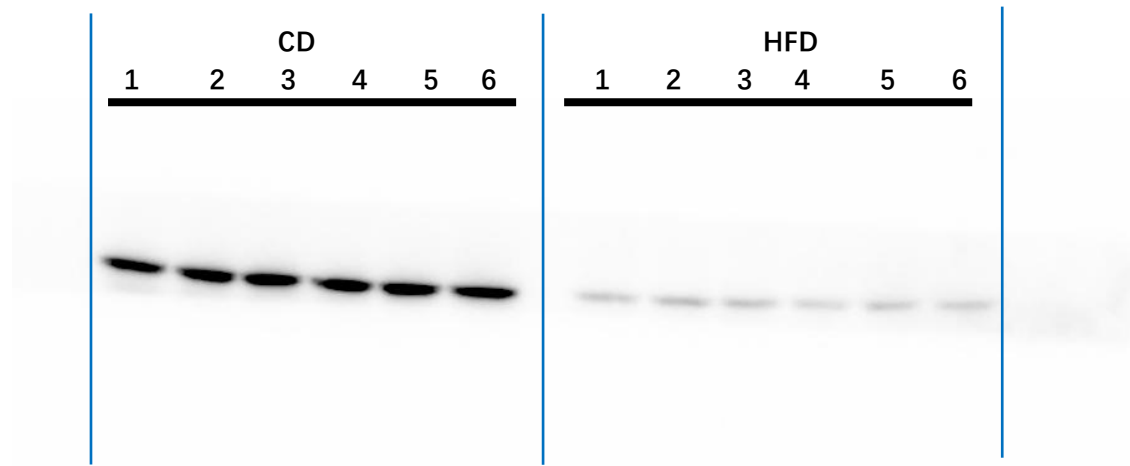


Figure 1G (CD:chow diet, HFD:high fat diet) 6 repeats
p-AKT (MW:60KD)



AKT (MW:60KD)

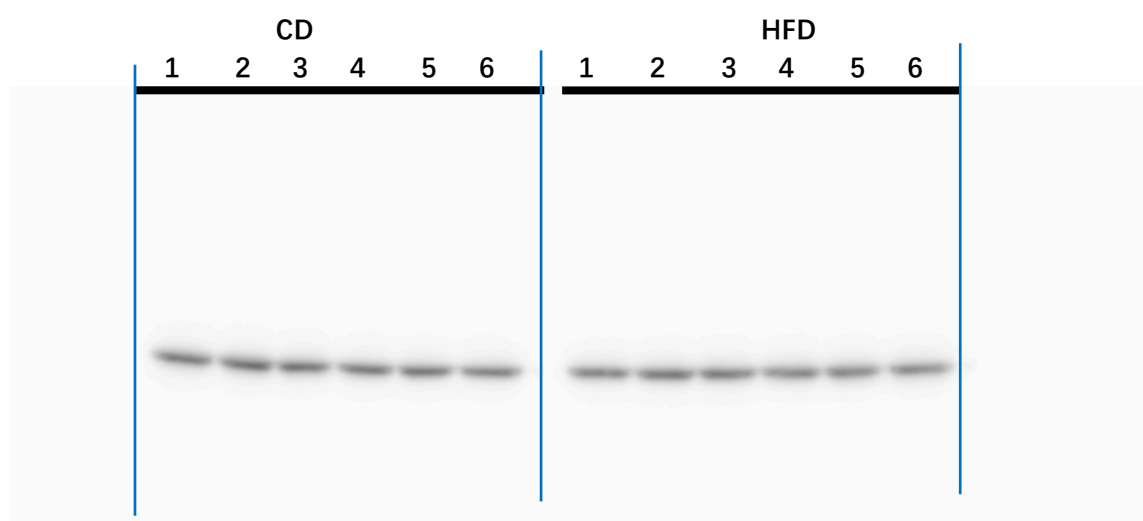
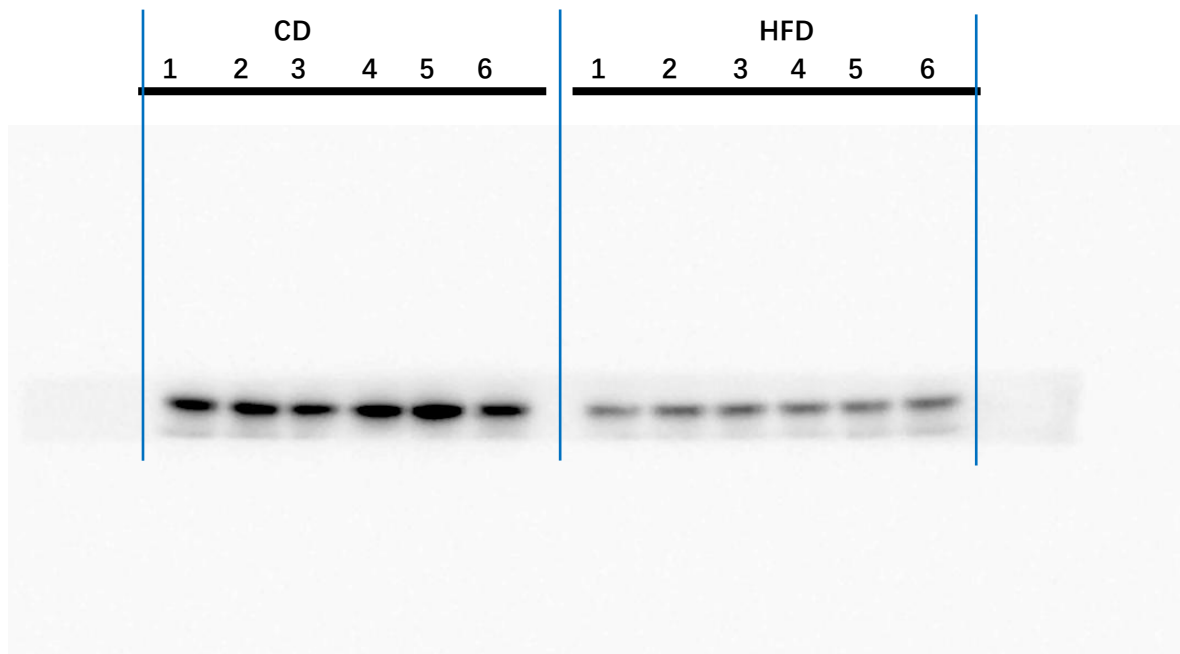


Figure 1G
p-GSK (MW:46KD)



GSK (MW:46KD)

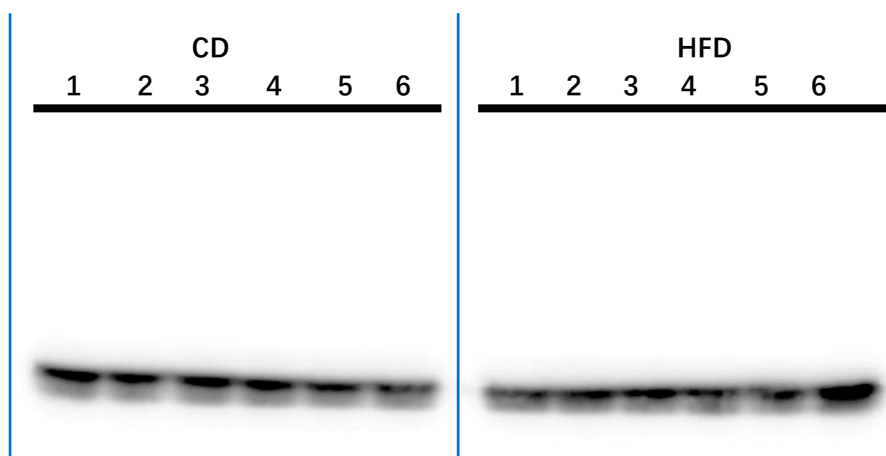


Figure 1G
 β -tubulin (MW:55KD)

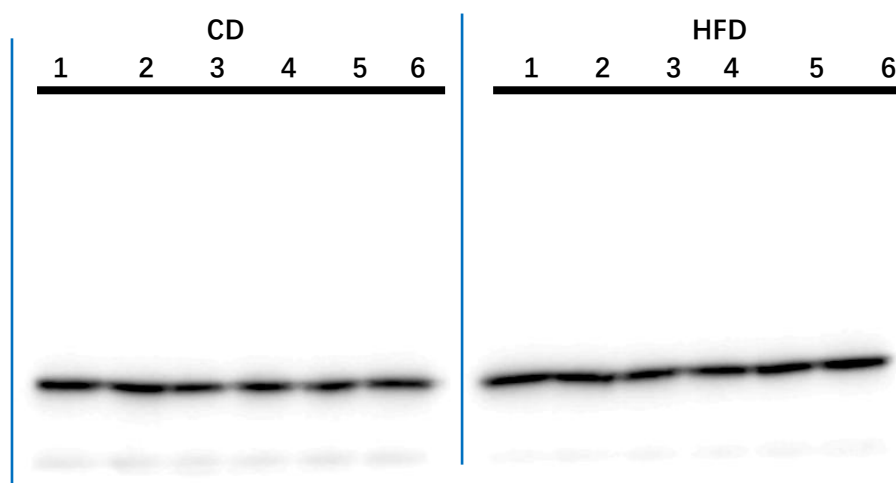
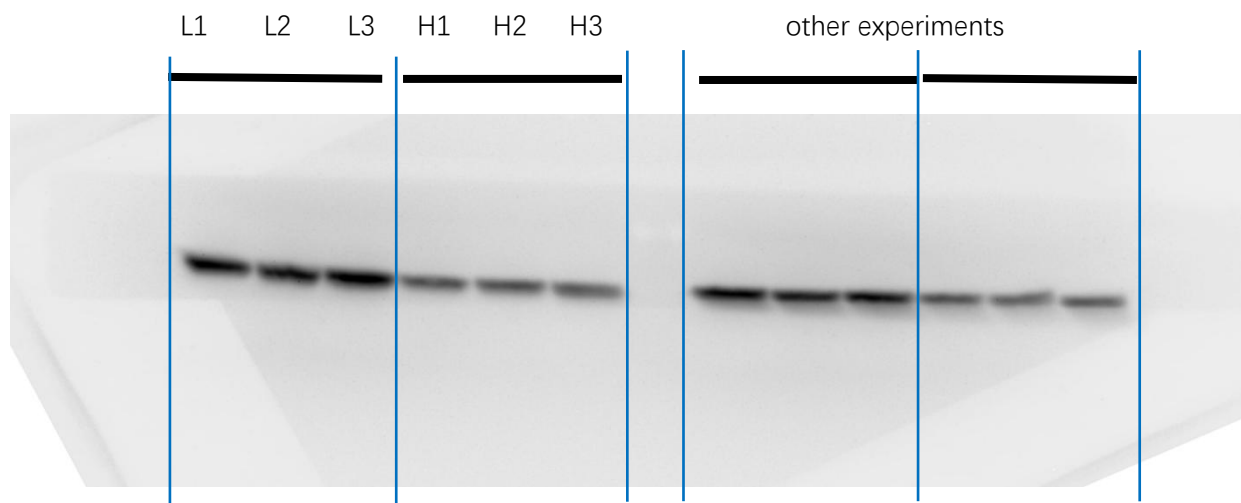


Figure 2E (L: L-Glu-MIN6-Sup; H:H-Glu-MIN6-Sup) 3 repeats

p-AKT (MW:60KD)



AKT (MW:60KD)

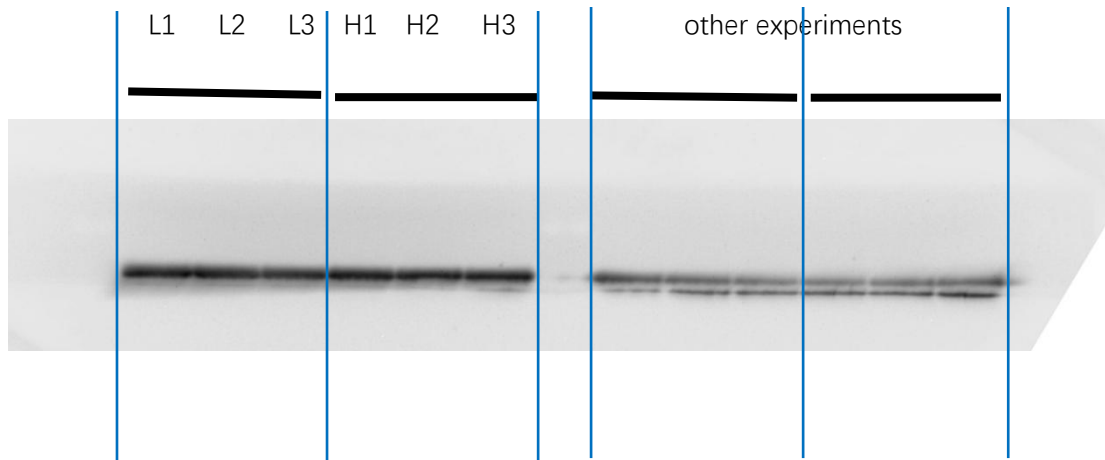
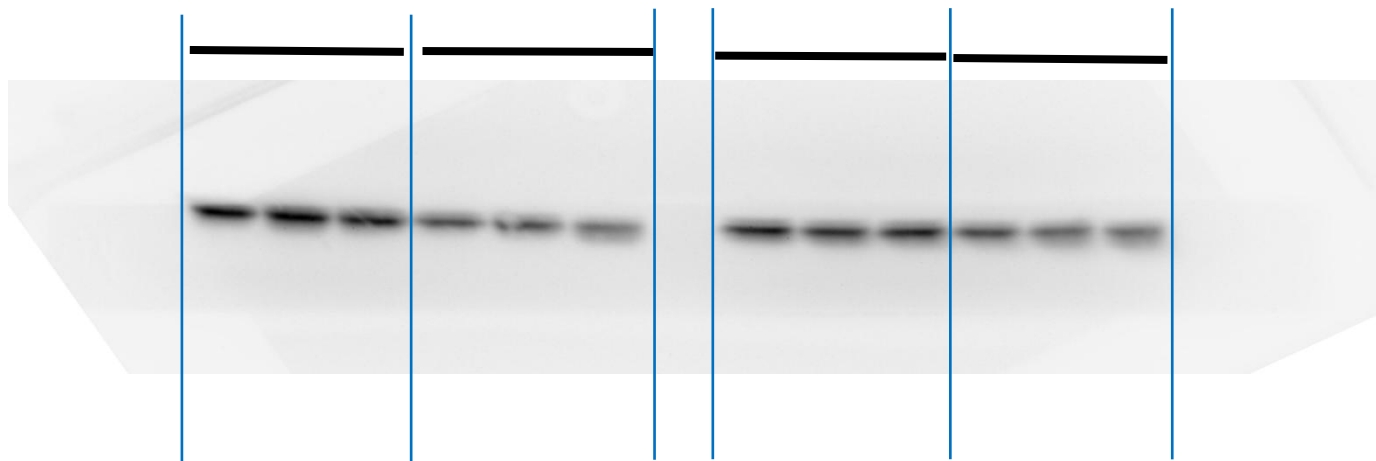


Figure 2E
p-GSK (MW:46KD)

L1 L2 L3 H1 H2 H3 other experiments



GSK (MW:46KD)

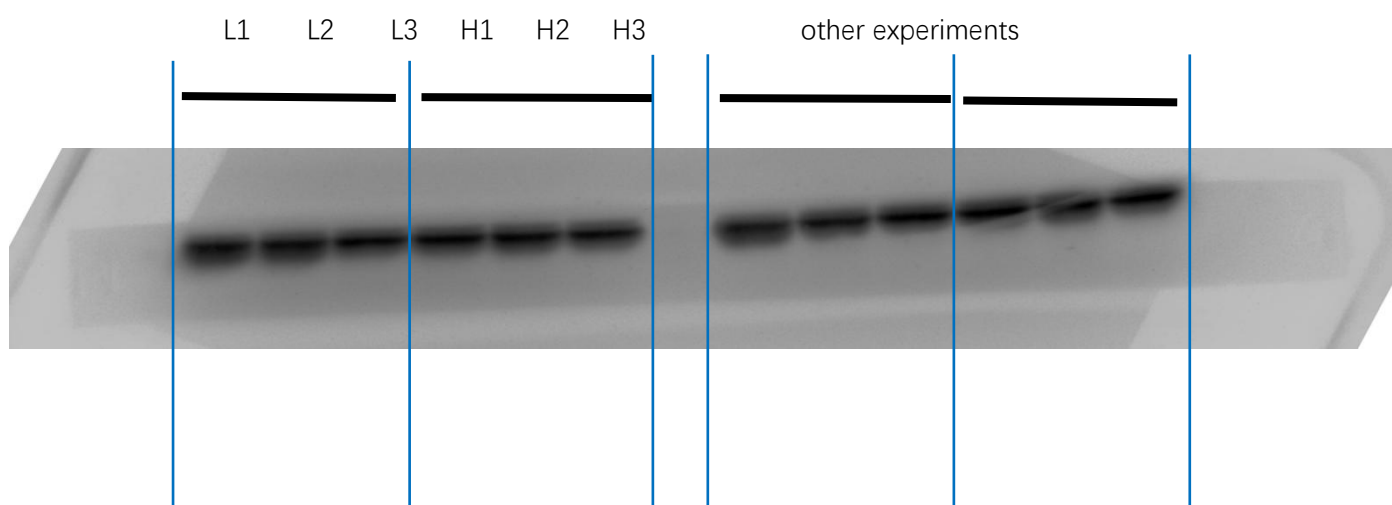


Figure 2E

β -tubulin (MW:55KD)

L: L-Glu-MIN6-Sup; H: H-Glu-MIN6-Sup

L1 L2 L3 H1 H2 H3

other experiments

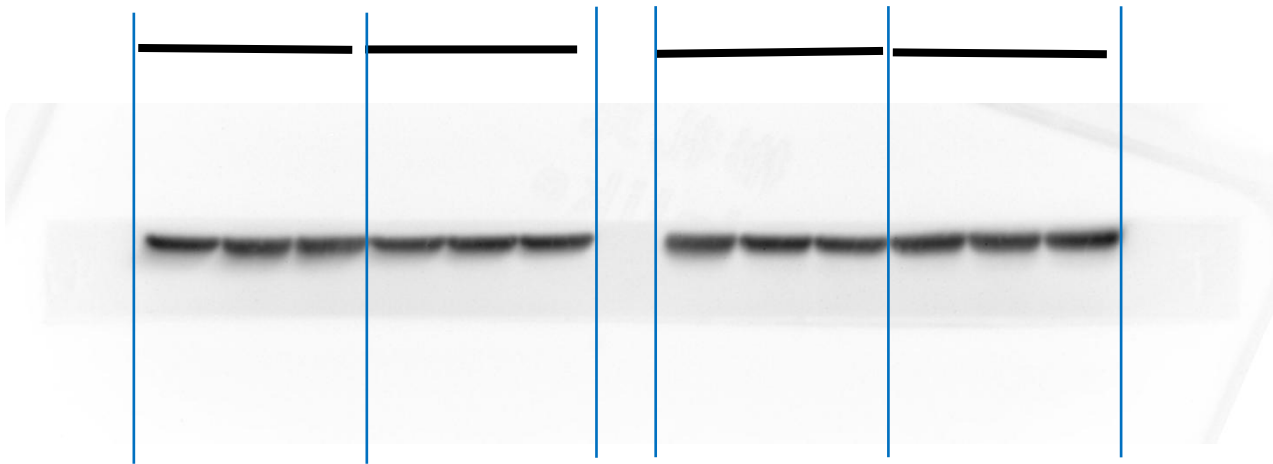
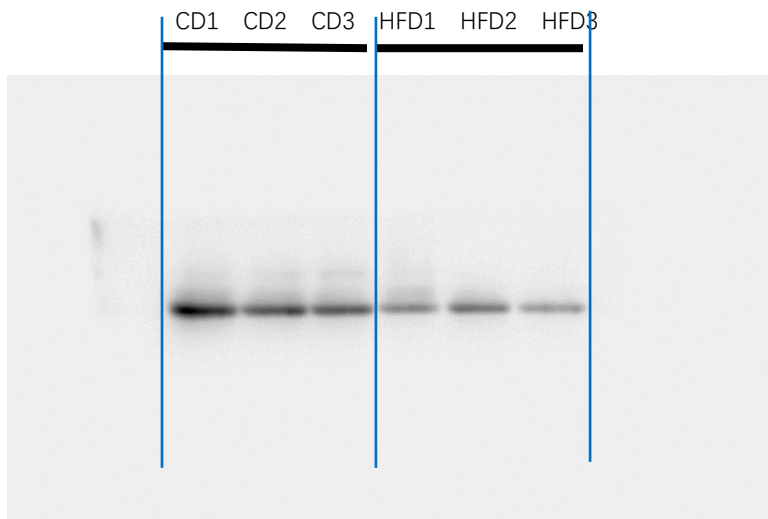


Figure 2I (CD: CD-IPC-Sup; HFD: HFD-IPC-Sup) 3 repeats

p-AKT (MW:60KD)



AKT (MW:60KD)

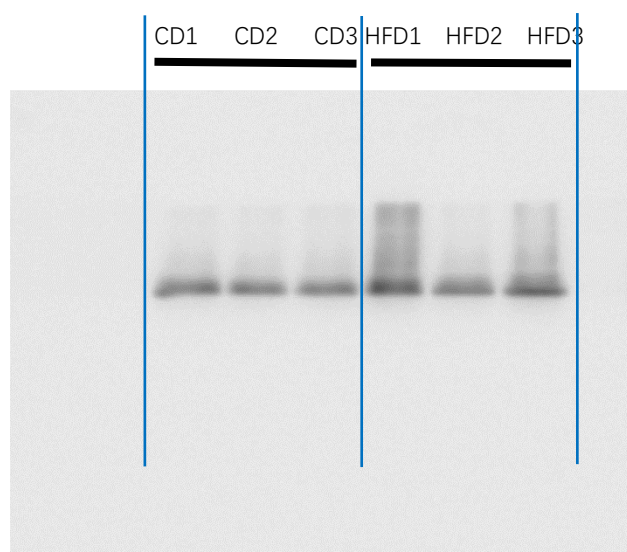
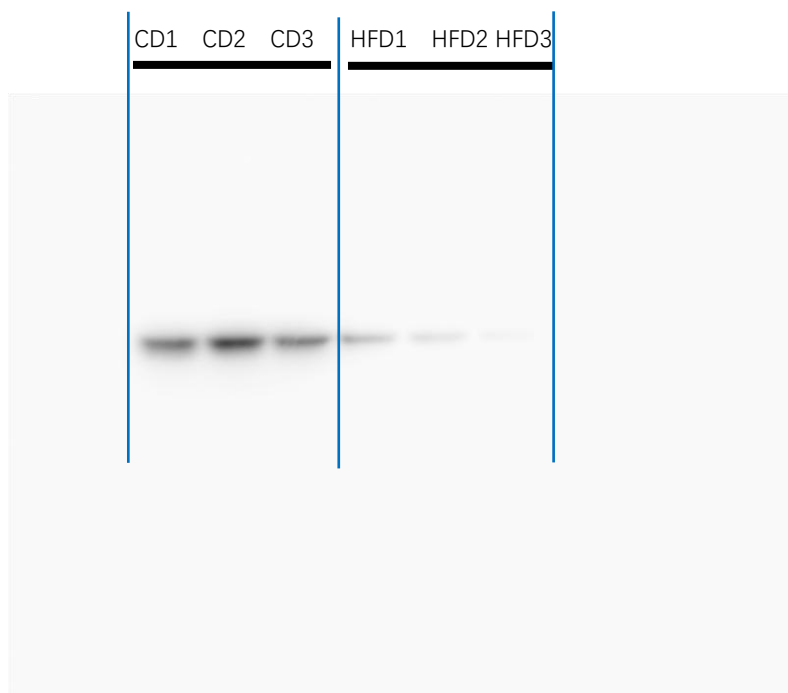


Figure 2I
p-GSK (MW:46KD)



GSK (MW:46KD)

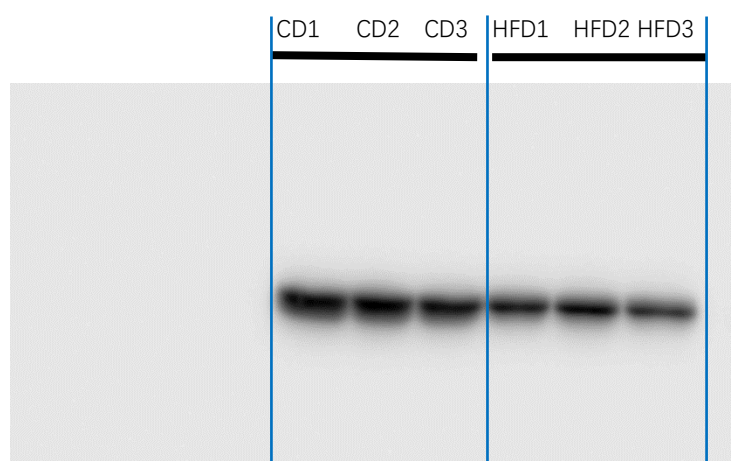


Figure 2I
 β -tubulin (MW:55KD)

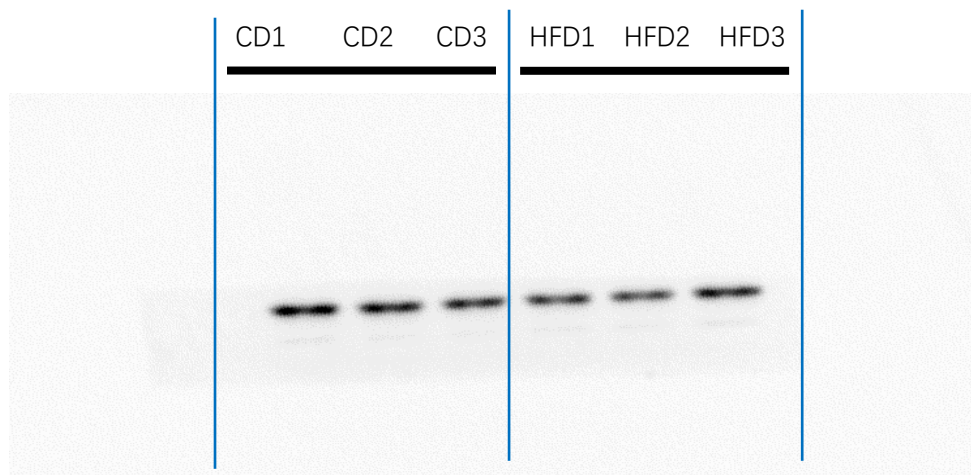
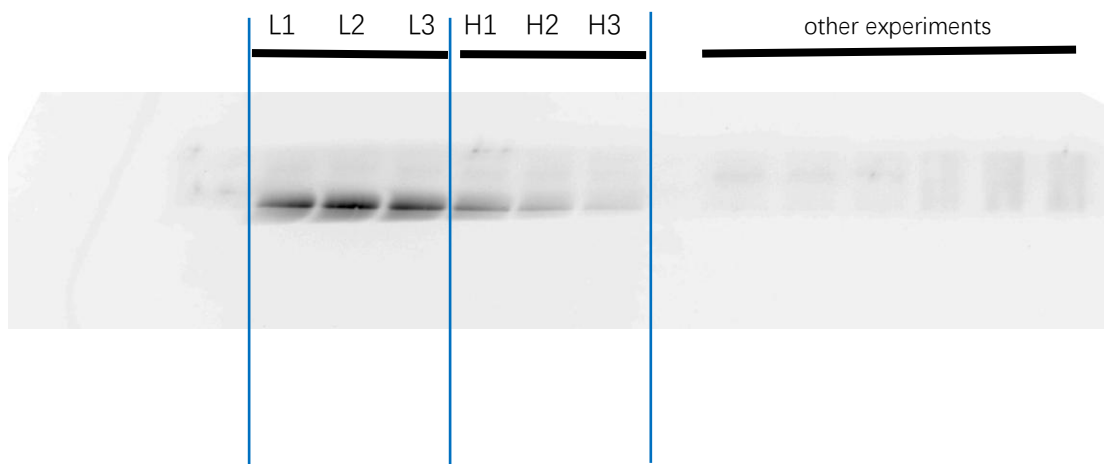


Figure 2M (L: L-Glu-MIN6-transewII; H: H-Glu-MIN6-transewII) 3 repeats
p-AKT (MW:60KD)



AKT (MW:60KD)

L1

L2

L3

H1

H2

H3

other experiments

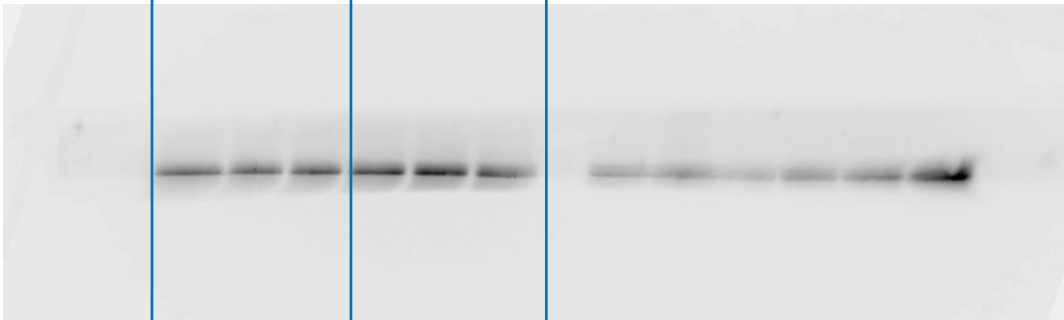
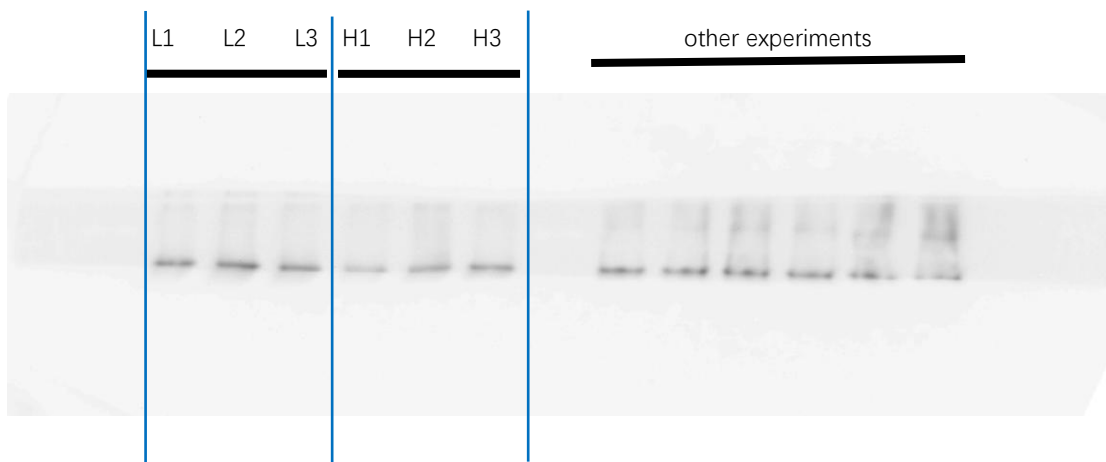


Figure 2M
p-GSK (MW:46KD)



GSK (MW:46KD)

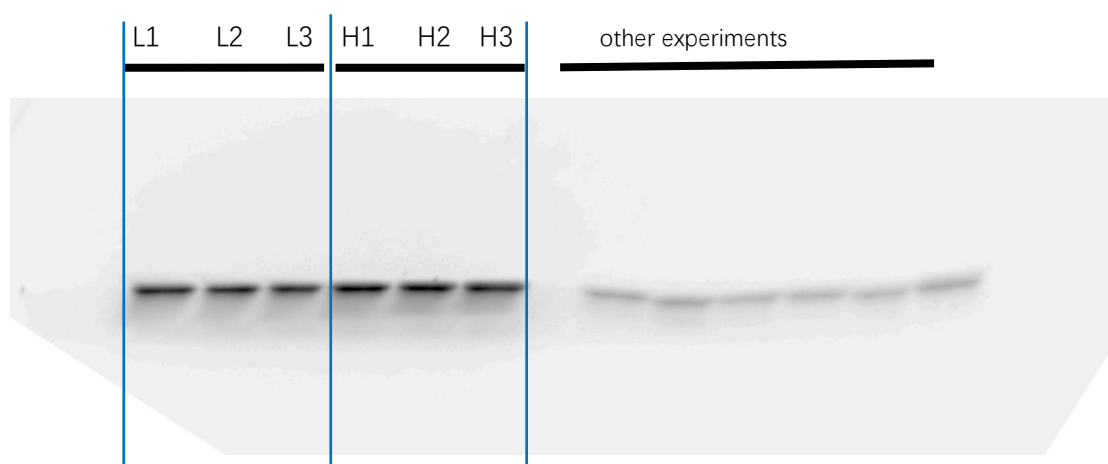


Figure 2M
 β -tubulin (MW:55KD)

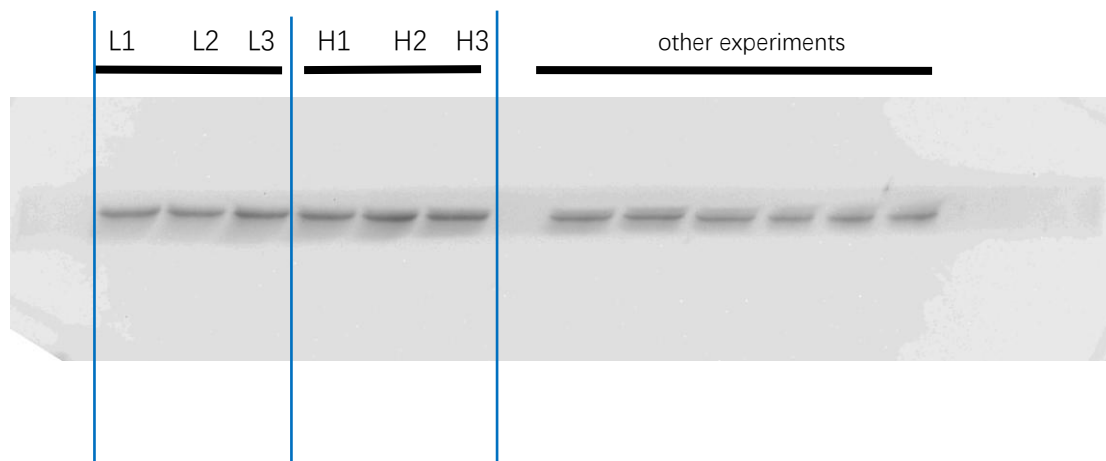
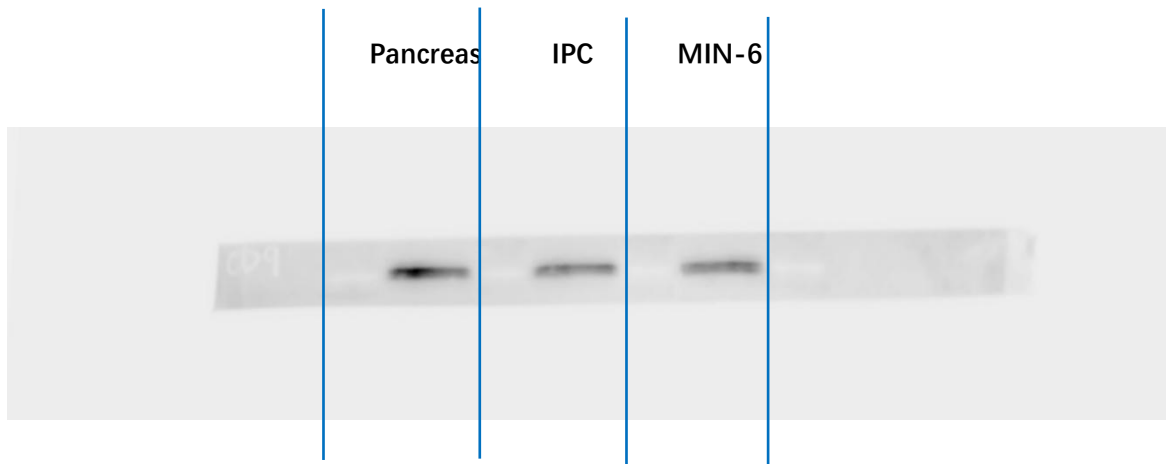


Figure 3C
CD9 (MW:27KD)

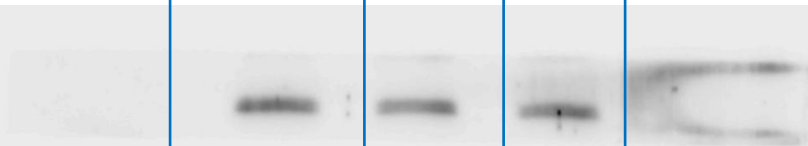


CD63 (MW:35KD)

Pancreas

IPC

MIN-6



FLOT1 (MW:47KD)

Pancreas

IPC

MIN-6

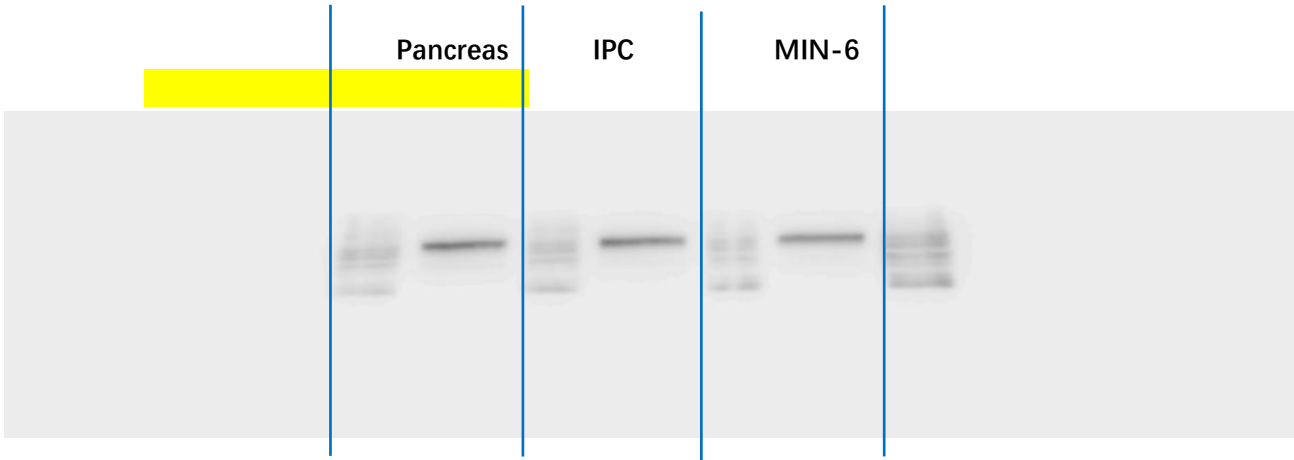
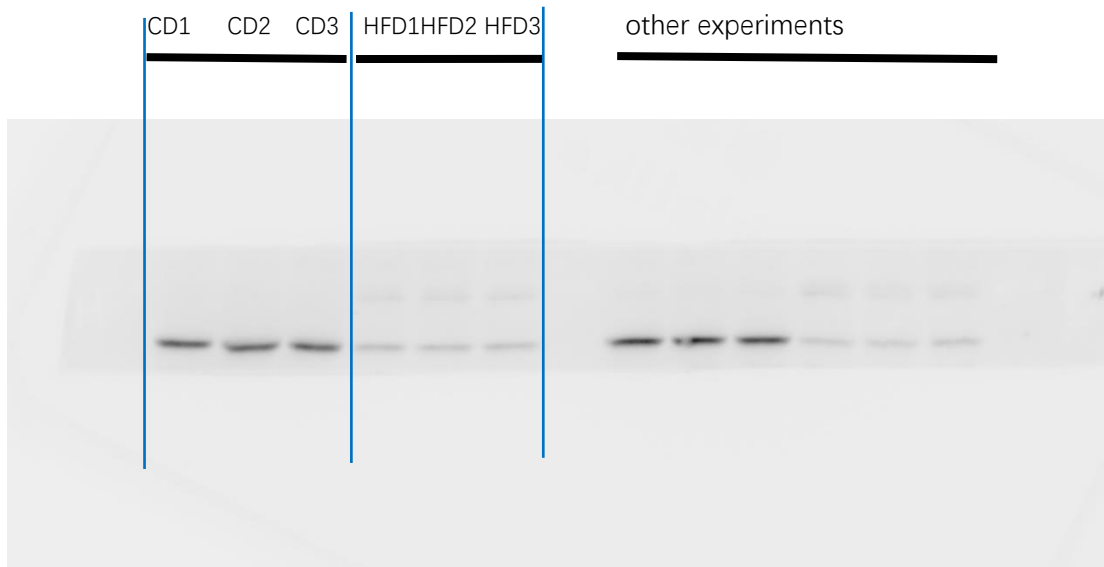
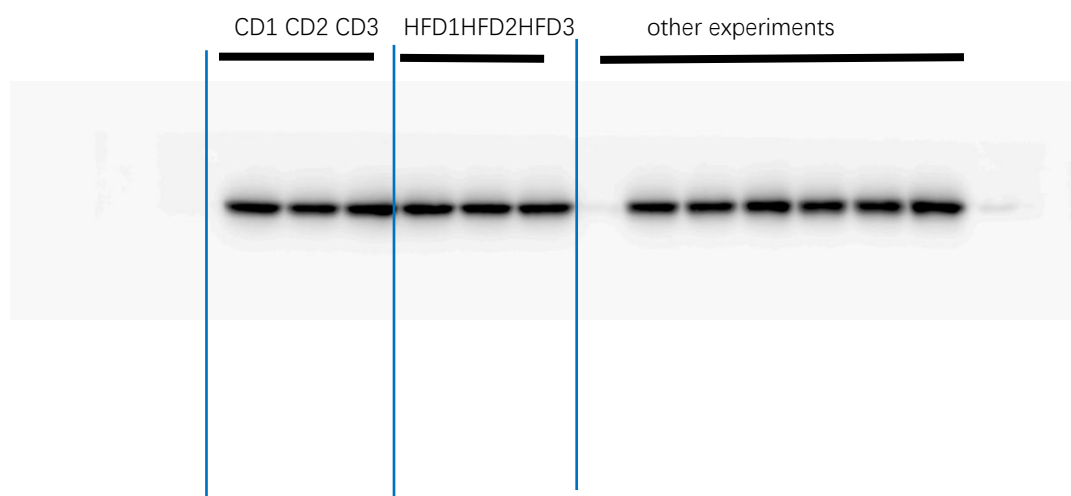


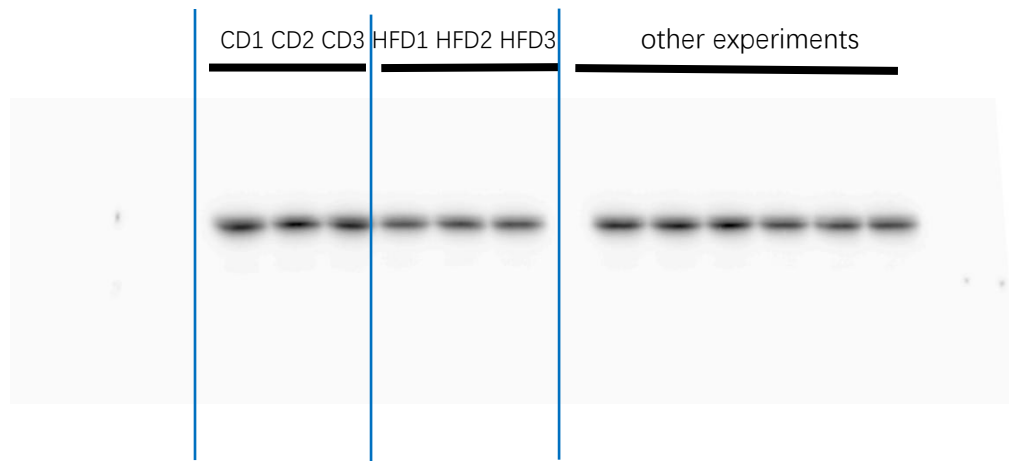
Figure 3E (CD:CD-IPC-Exos; HFD: HFD-IPC-Exos) 3 repeats
p-AKT (MW:60KD)



AKT (MW:60KD)



Western blot analysis of pS6 (S244) in the hippocampus. The blot shows bands for CD1, CD2, CD3, HFD1, HFD2, HFD3, and other experiments. The bands are labeled with their respective experiment names.



GSK (MW:46KD)

CD1CD2 CD3 HFD1 HFD2 HFD3

other experiments

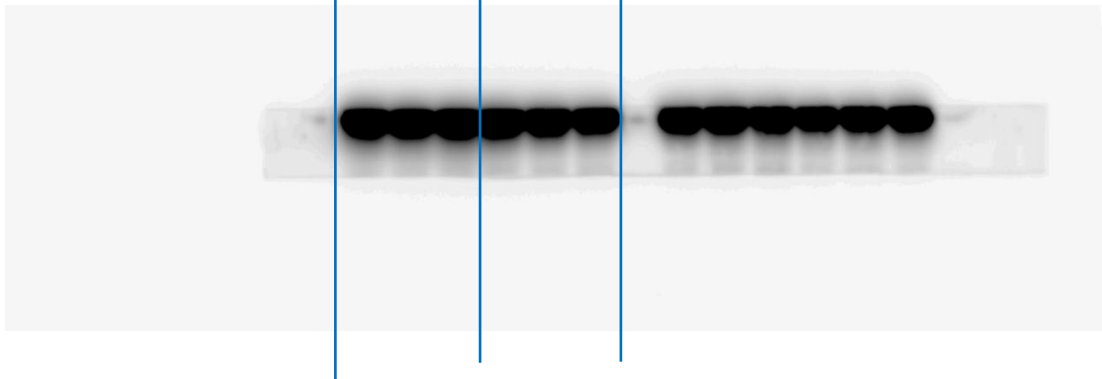


Figure 3E
 β -tubulin (MW:55KD)

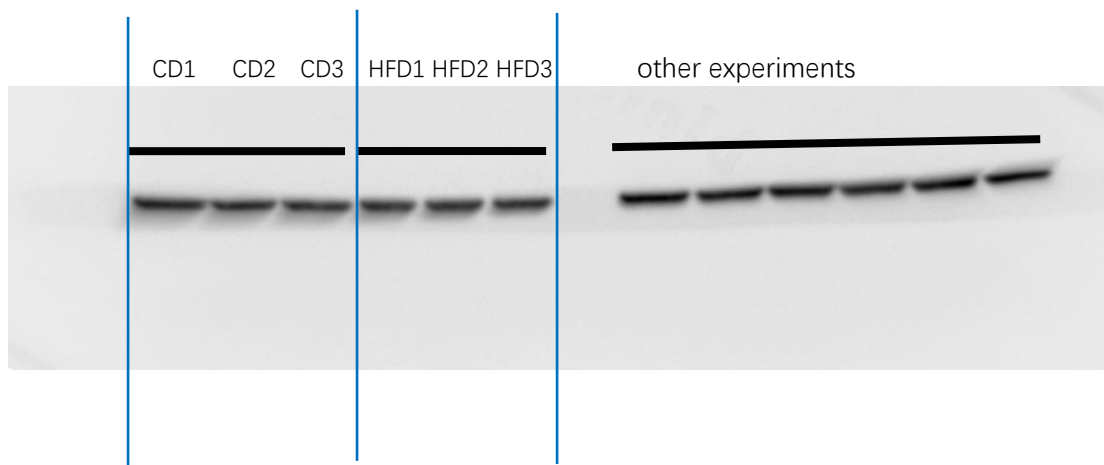


Figure 3I (L:L-Glu-MIN6-Exos; H: H-Glu-MIN6-Exos) 3 repeats

p-AKT (MW:60KD)



AKT (MW:60KD)

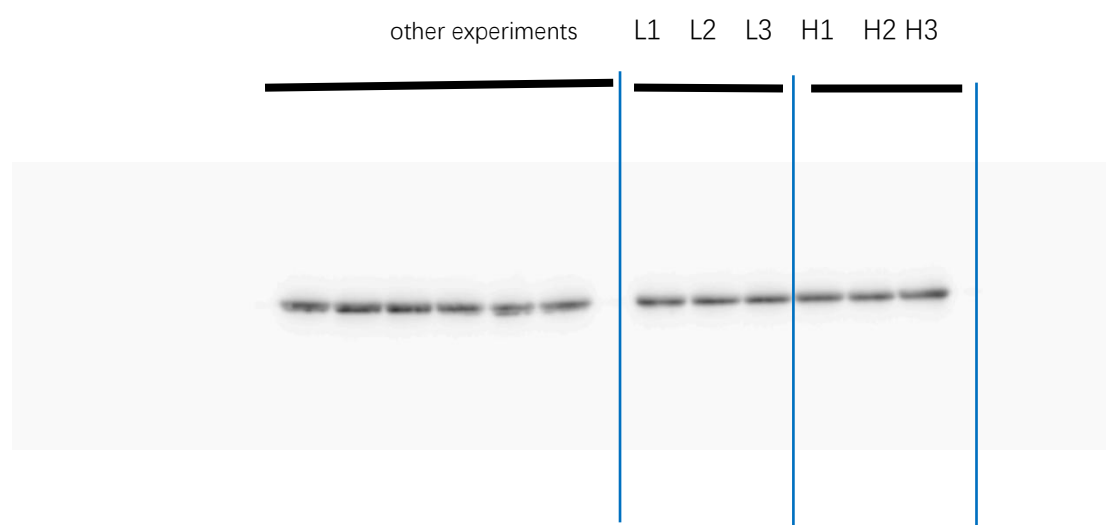
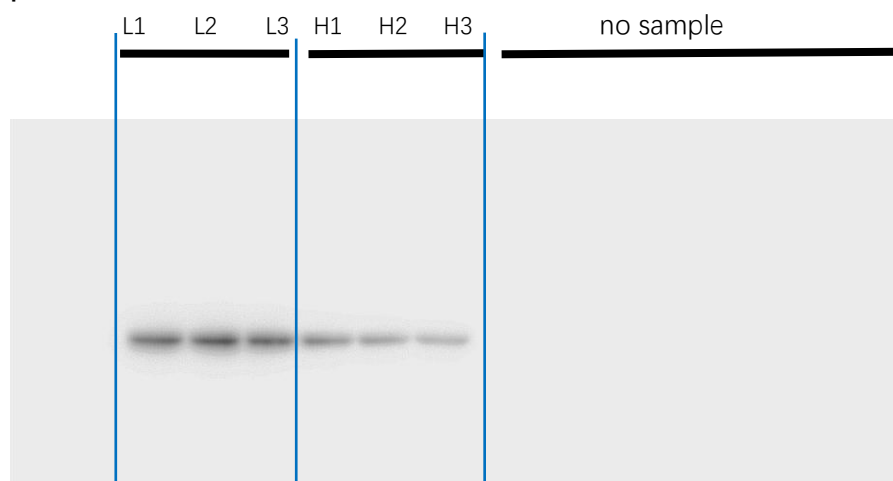
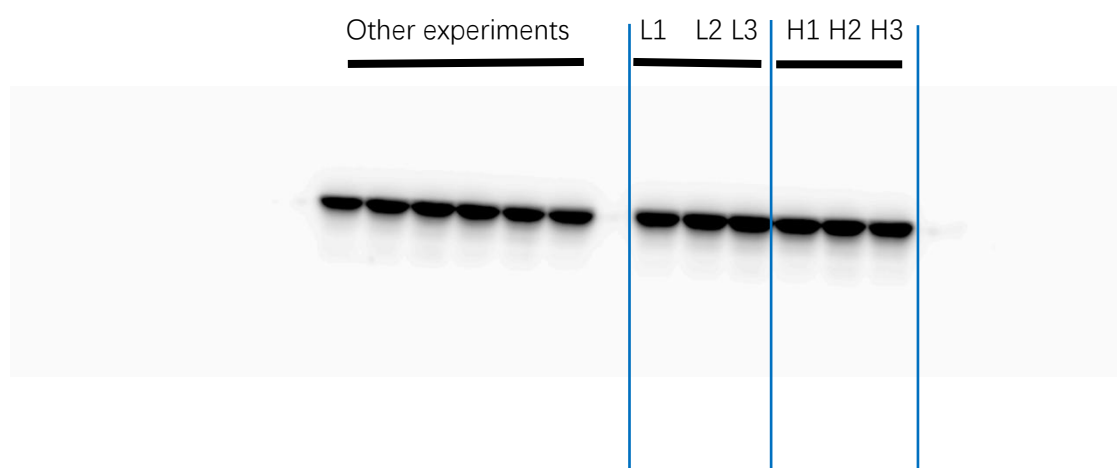


Figure 3I
p-GSK (MW:46KD)



GSK (MW:46KD)

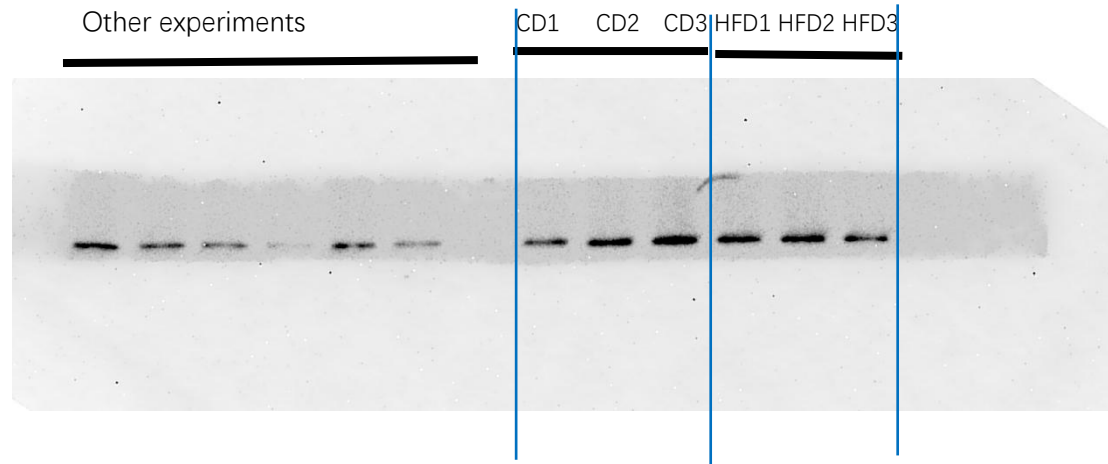


Western blot analysis showing protein expression across various cell lines. The lanes are labeled: Other experiments, L1, L2, L3, H1, H2, and H3. The blot shows a single band of protein expression across all lanes, indicating consistent protein levels.

Figure 3M (CD: CD-IPC-Exos free; HFD: HFD-IPC-Exos free) 3 repeats

p-AKT (MW:60KD)

CD: CD-IPC-Exos free; HFD: HFD-IPC-Exos free



AKT (MW:65KD)

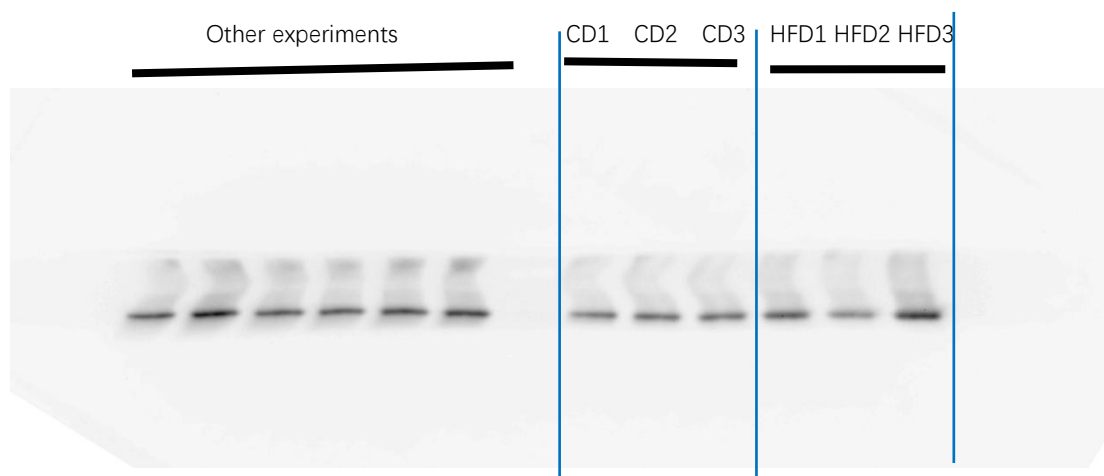
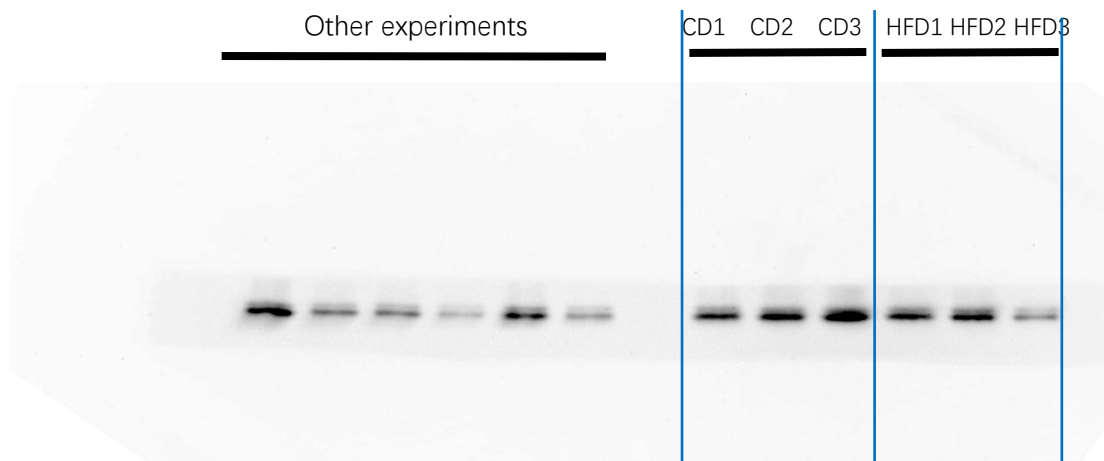


Figure 3M
p-GSK (MW:40KD)



GSK (MW:46KD)

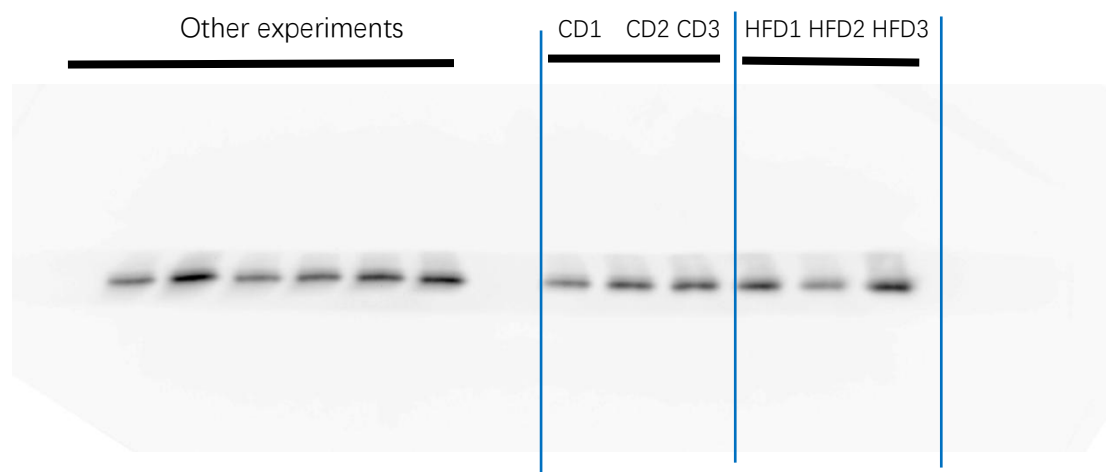
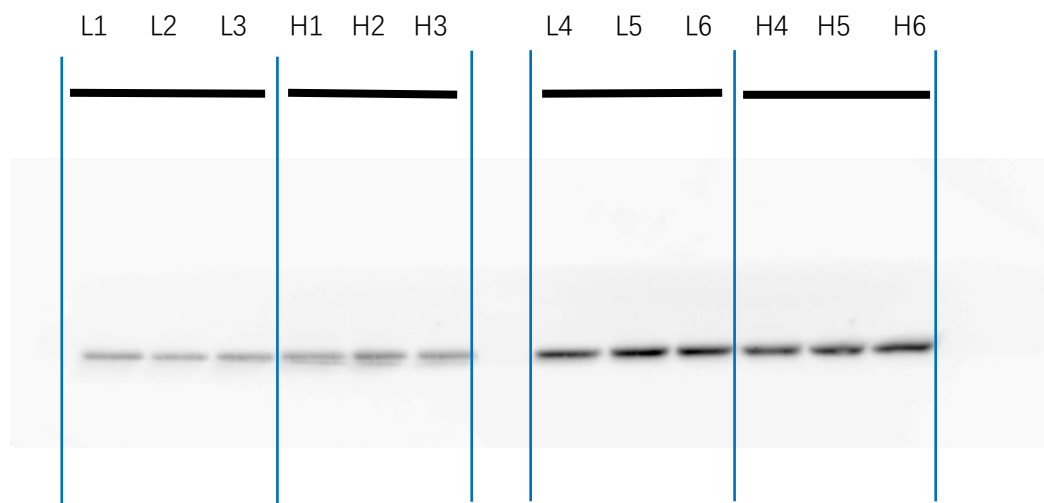


Figure 3M
 β -tubulin (MW:55KD)



Figure 3P (L: L-Glu-MIN6-Exos free; H:H-Glu-MIN6-Exos free) 3 repeats
AKT (MW:60KD)



p-AKT (MW:60KD)

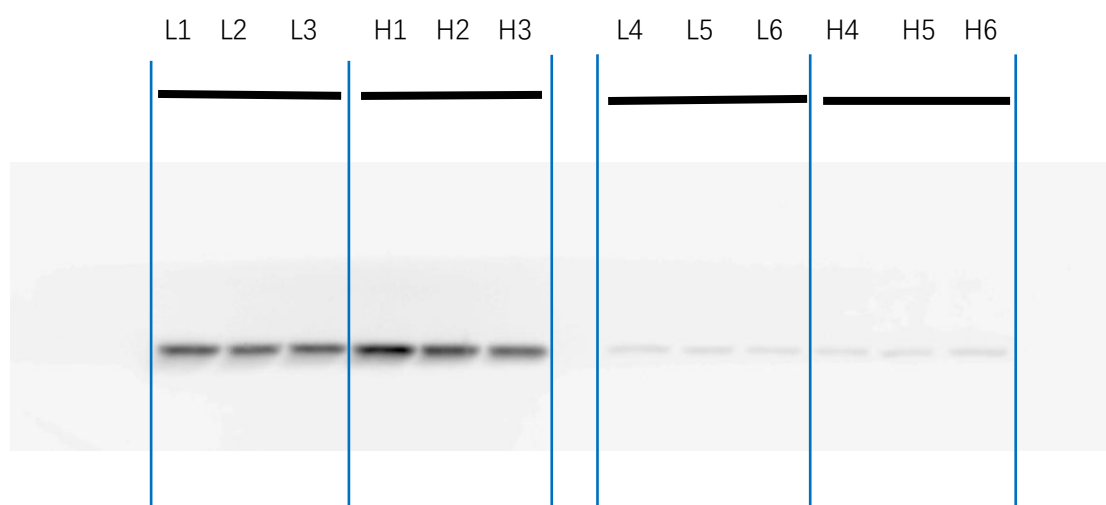
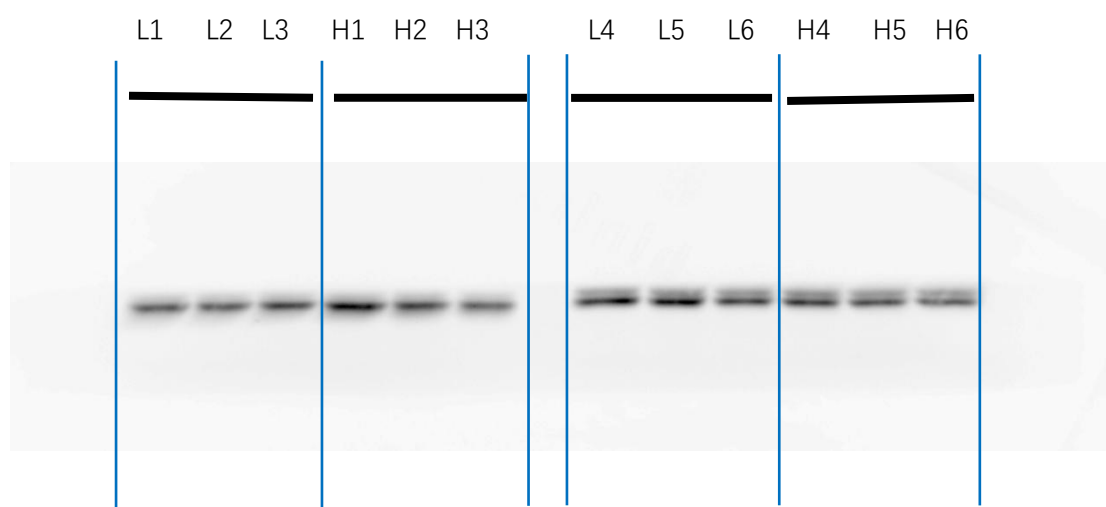


Figure 3P
p-GSK (MW:46KD)



GSK (MW:46KD)

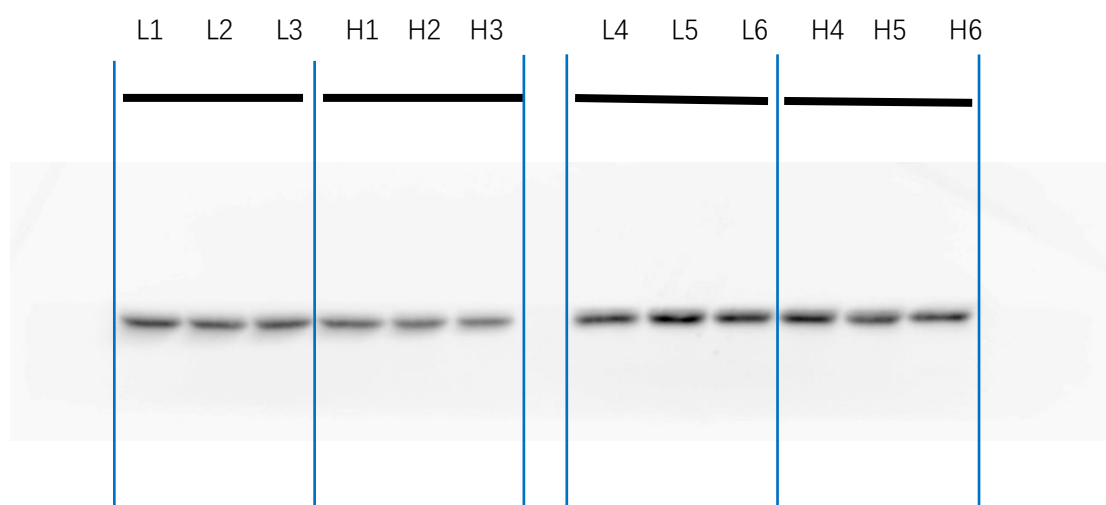


Figure 3P
 β -tubulin (MW:55KD)

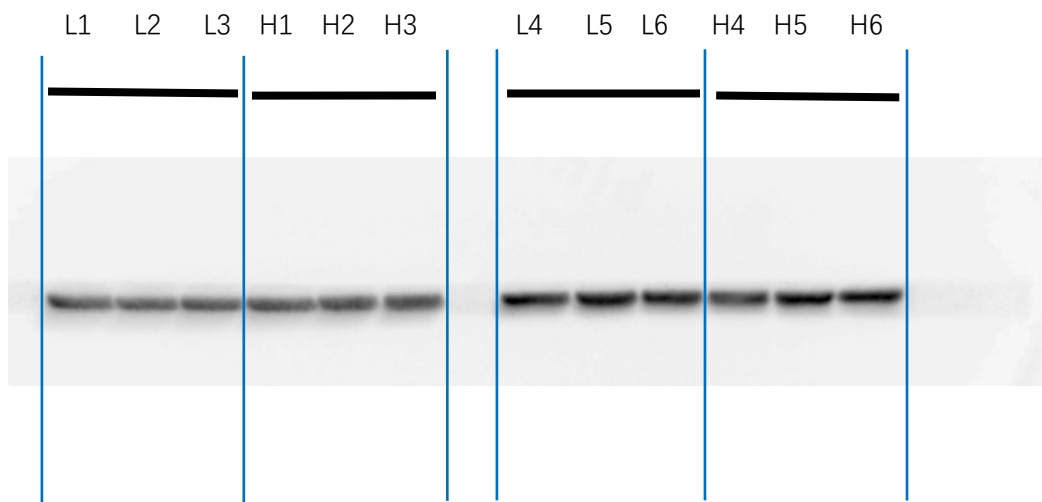
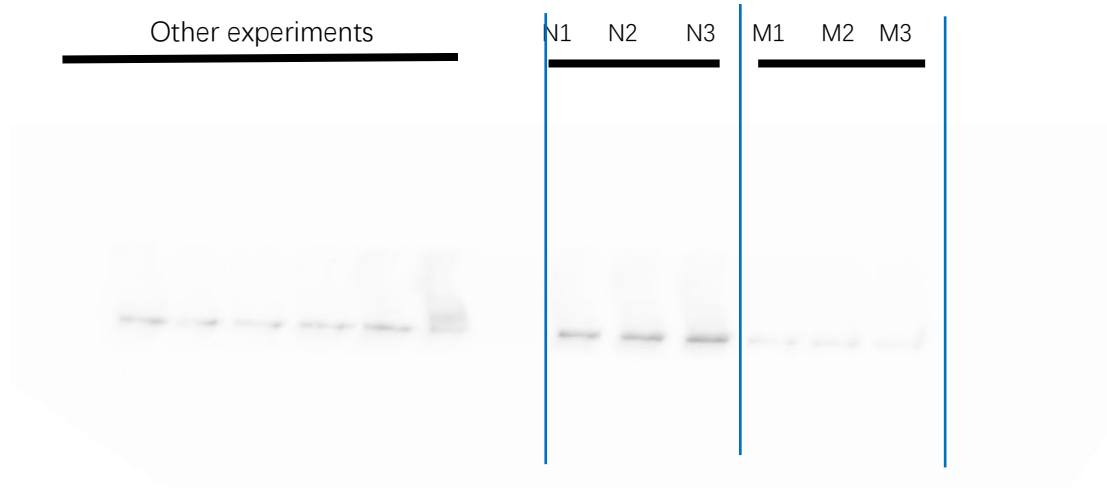


Figure 5A N:NCM(negative control mimics); M:375 mimics 3 repeats
p-AKT (MW:60KD)



AKT (MW:60KD)

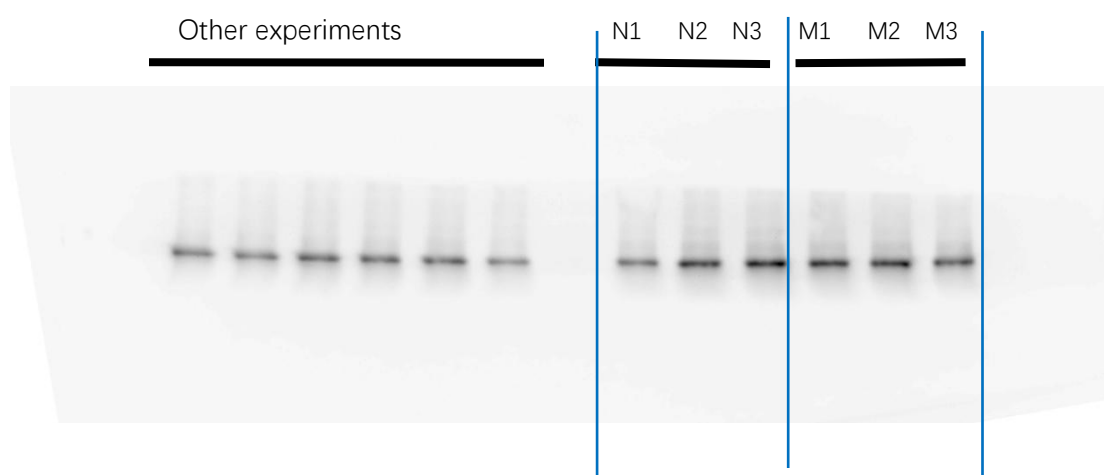
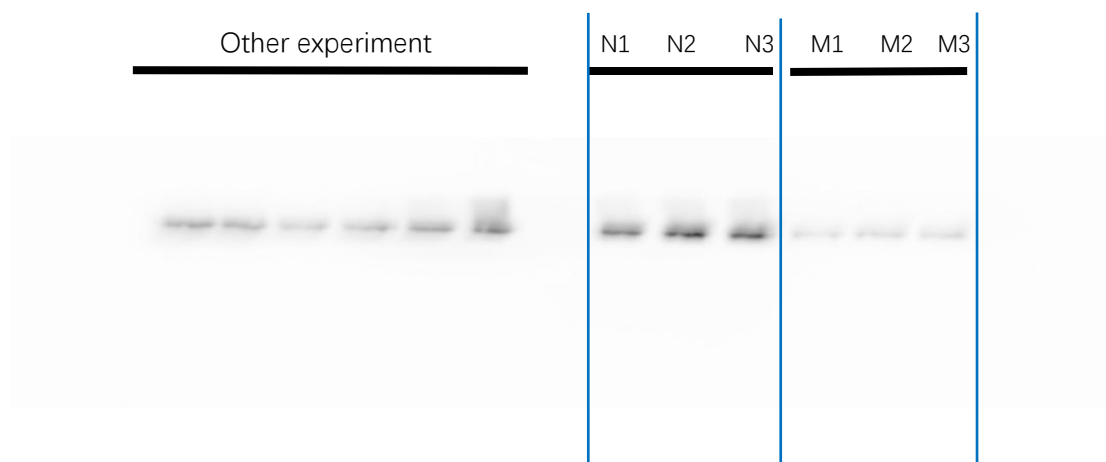


Figure 5A
p-GSK (MW:46KD)



GSK (MW:46KD)

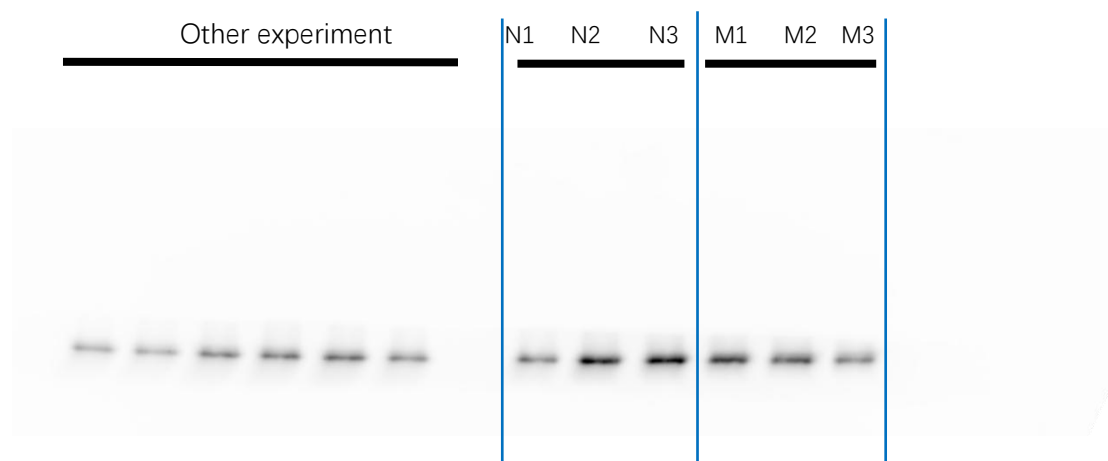


Figure 5A
β-tubulin (MW:55KD)

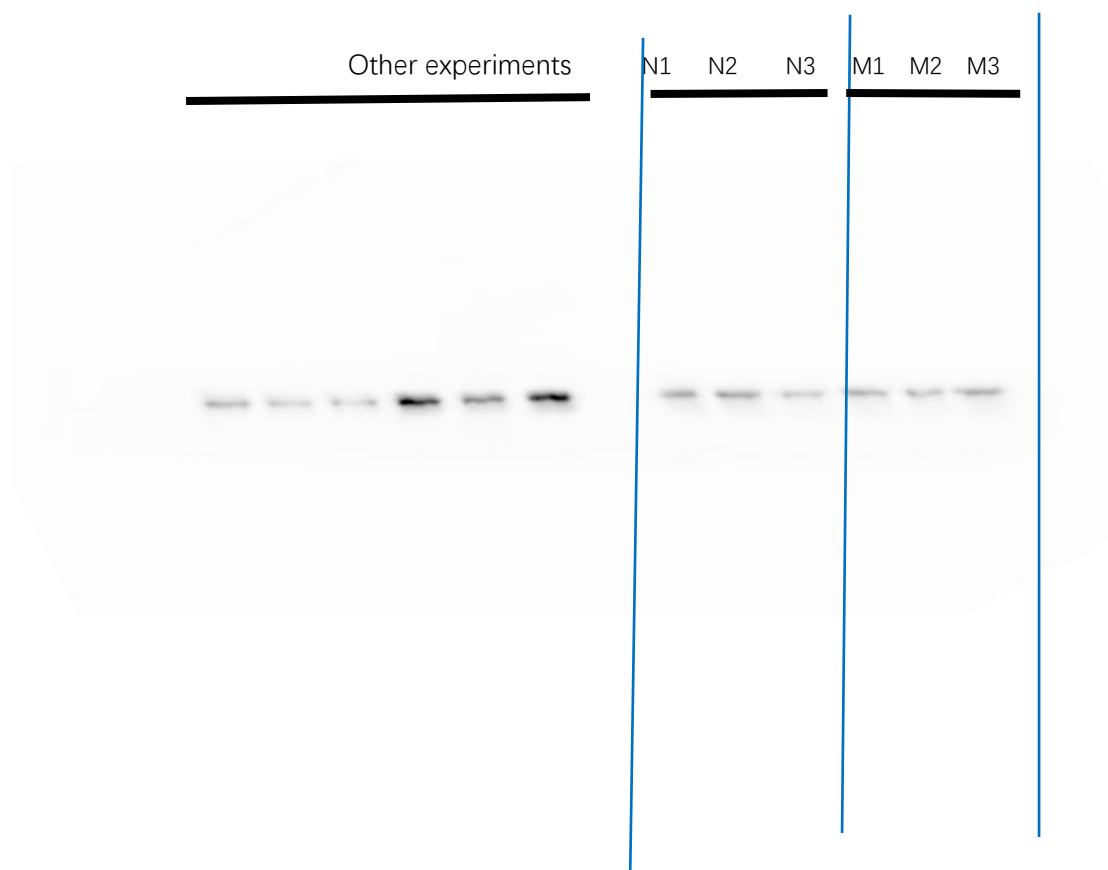
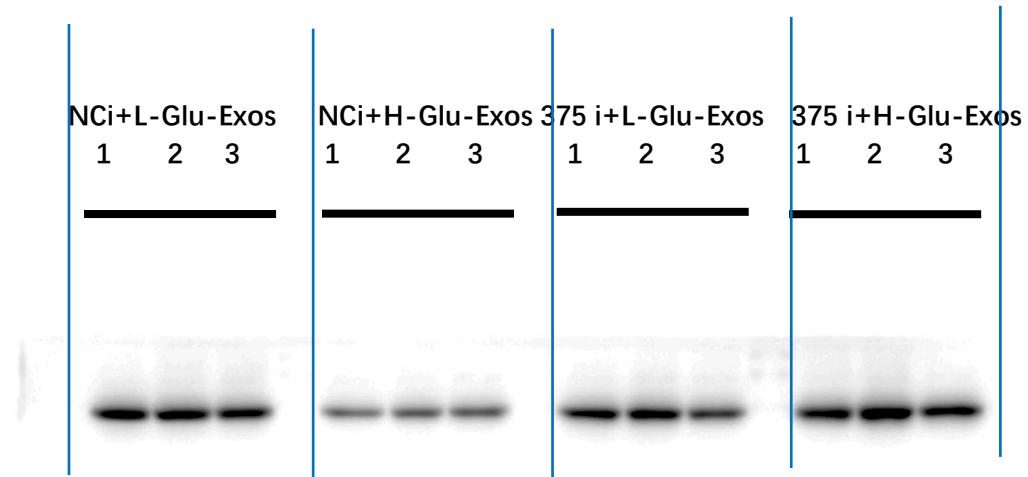


Figure 5E (NCi+L-Glu-Exos, NCi+H-Glu-Exos, 375i+L-Glu-Exos,375 i+H-Glu-Exos)

p-AKT (MW:60KD)



AKT (MW:60KD)

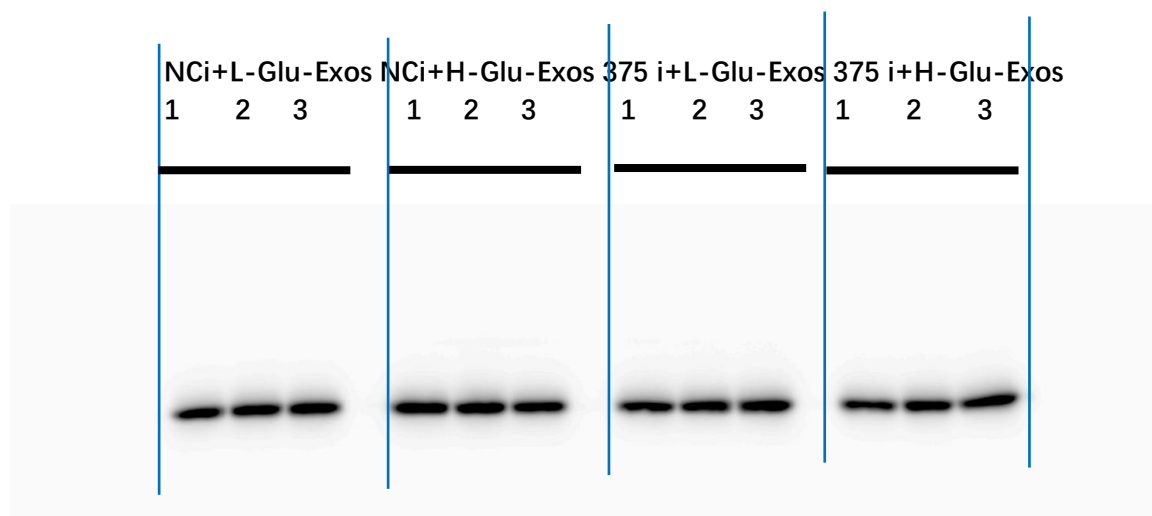
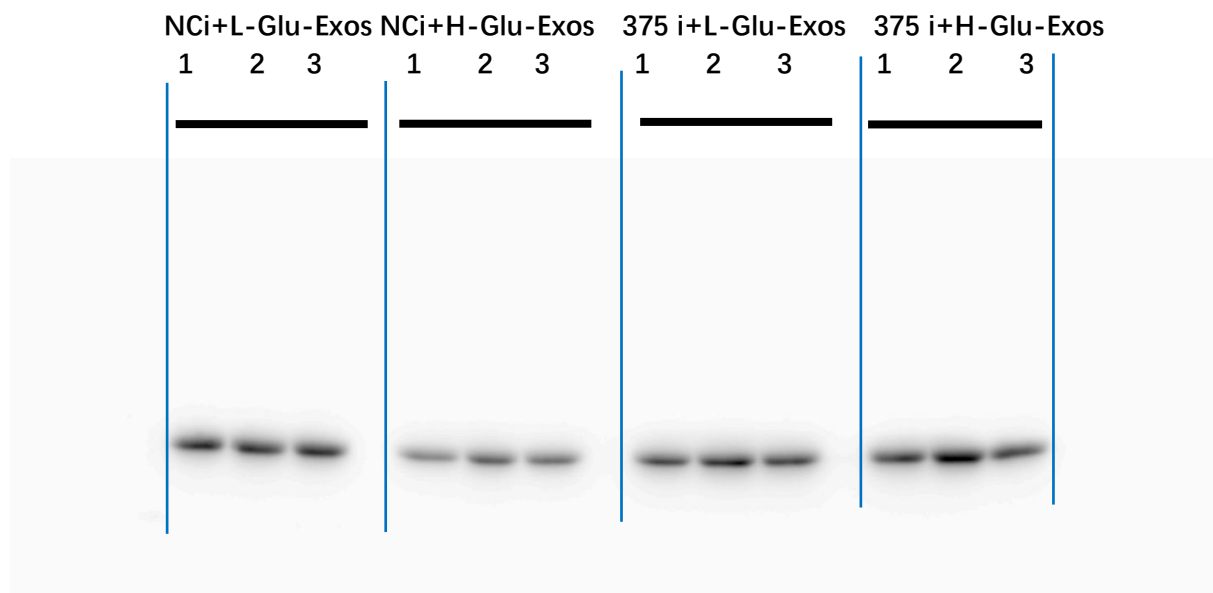


Figure 5E
p-GSK (MW:46KD)



GSK (MW:46KD)

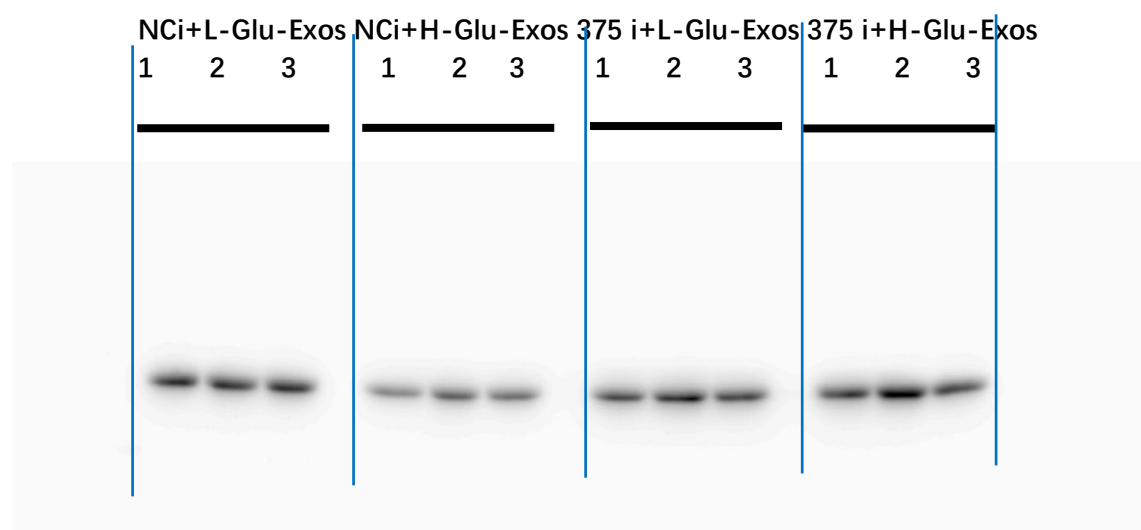


Figure 5E
 β -actin (MW:45KD)

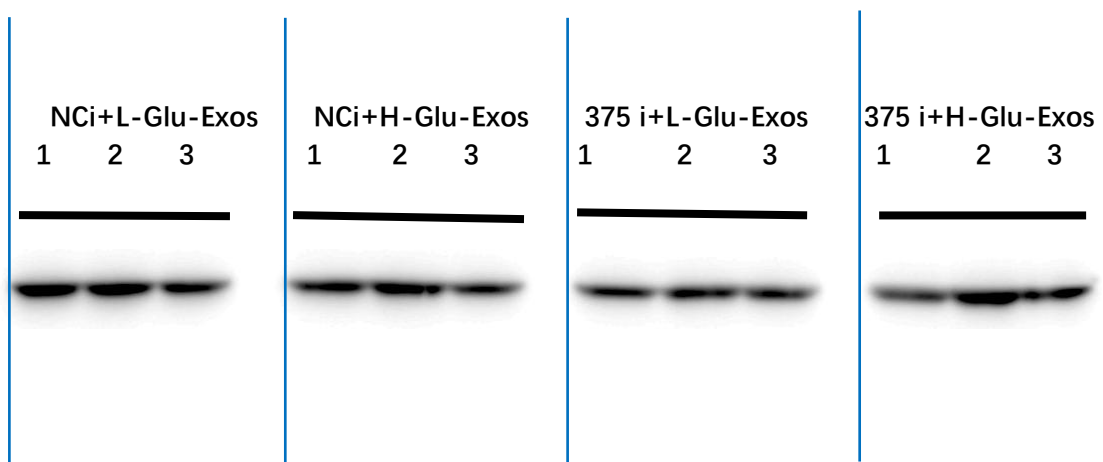


Figure 6B N: NC(negative control); S:siRNA-Rbpj

p-AKT (MW:60KD)



AKT (MW:60KD)

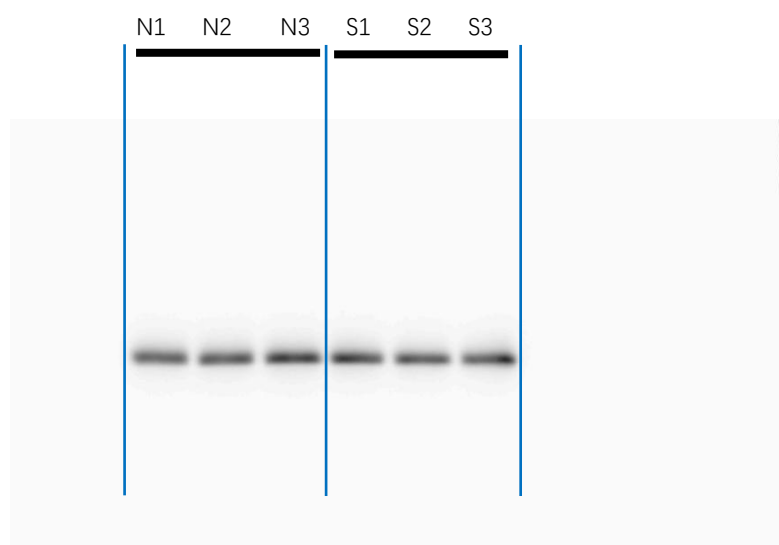


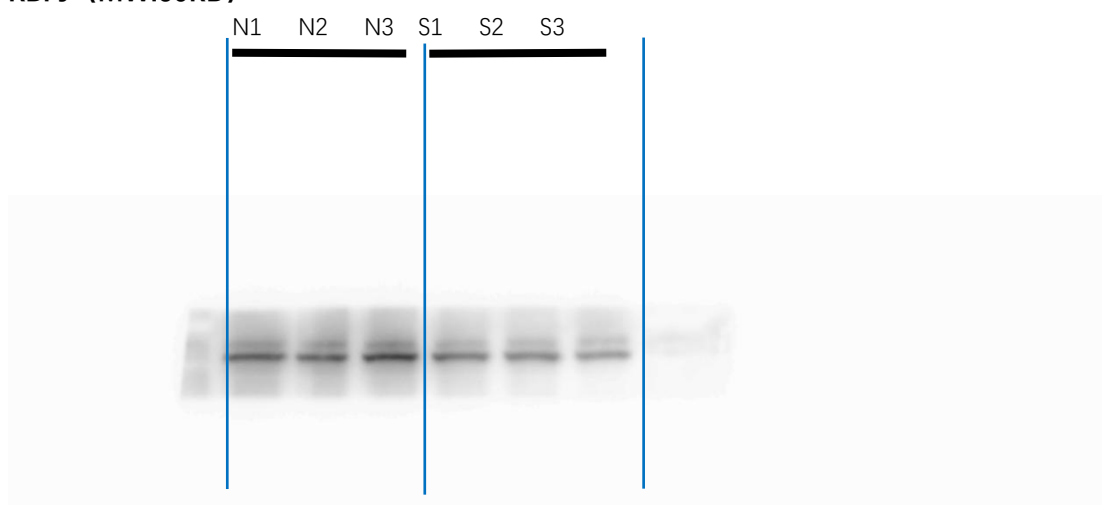
Figure 6B
p-GSK (MW:46KD)



GSK (MW:46KD)



Figure 6B
RBPJ (MW:60KD)

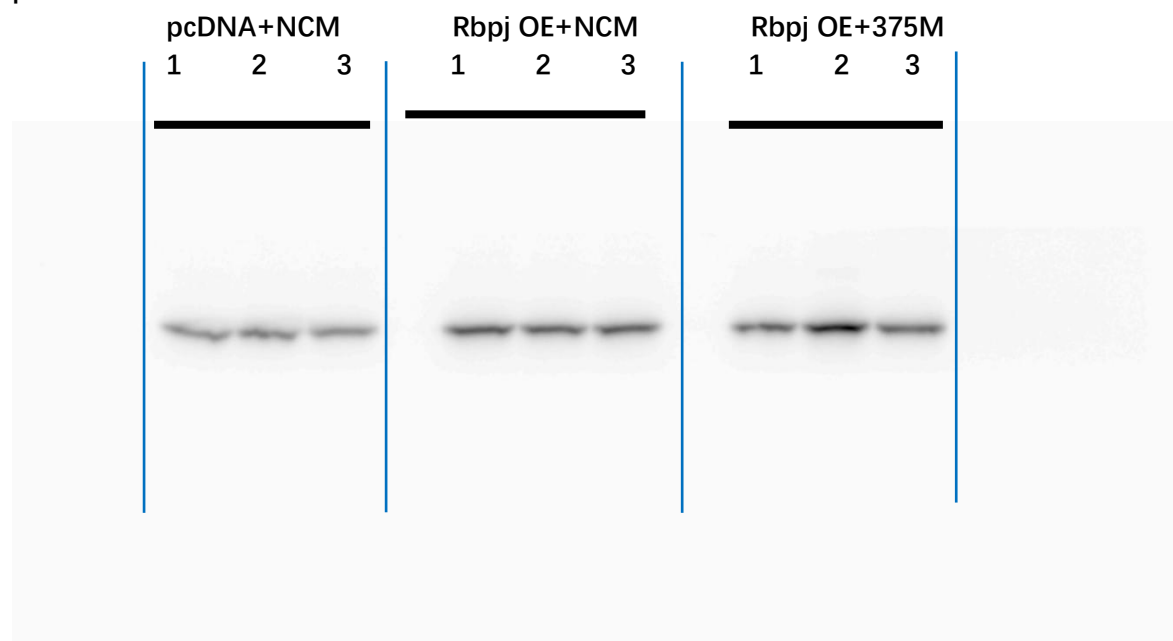


β -actin (MW:45KD)



Figure 6G (pcDNA+NCM,Rbpj OE+NCM,Rbpj OE+375M)

p-AKT (MW:60KD)



AKT (MW:60KD)

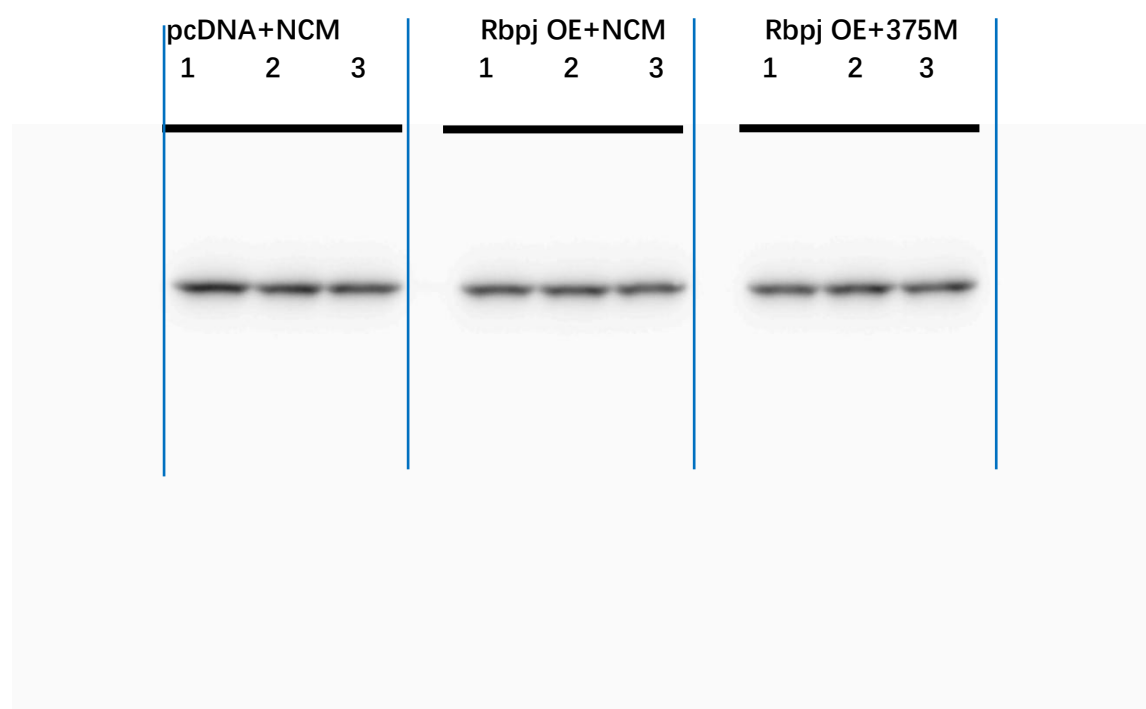
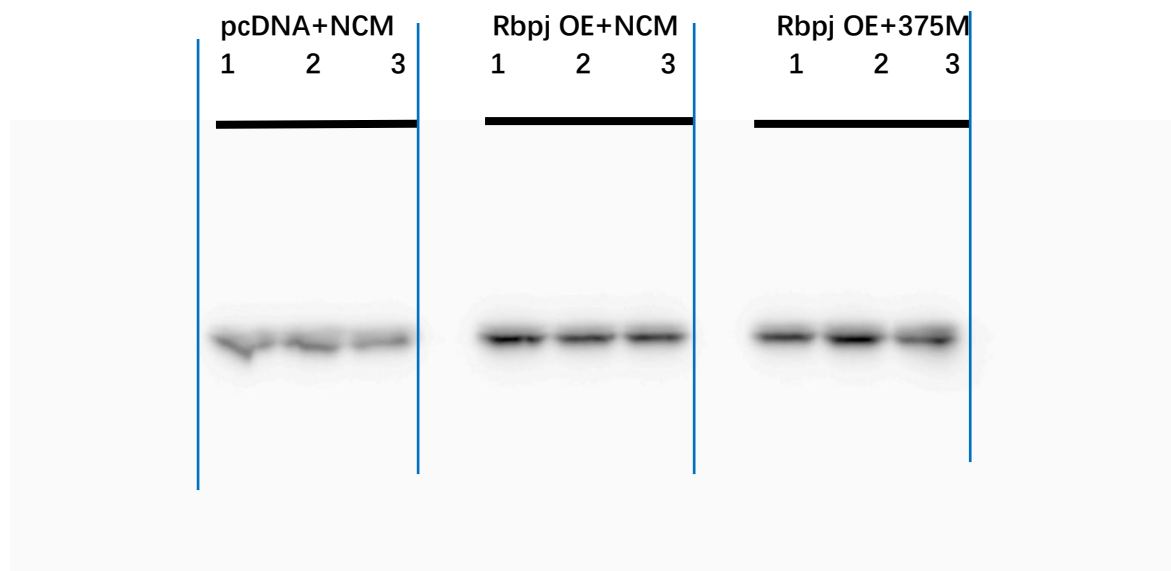


Figure 6G
p-GSK (MW:46KD)



GSK (MW:46KD)

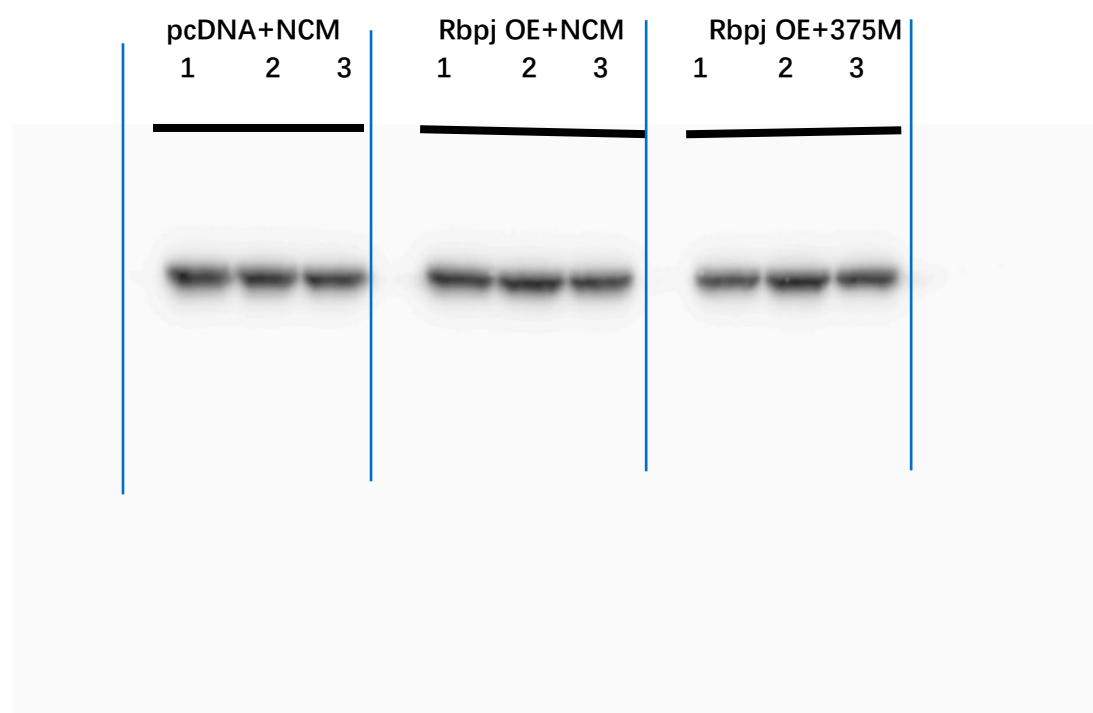
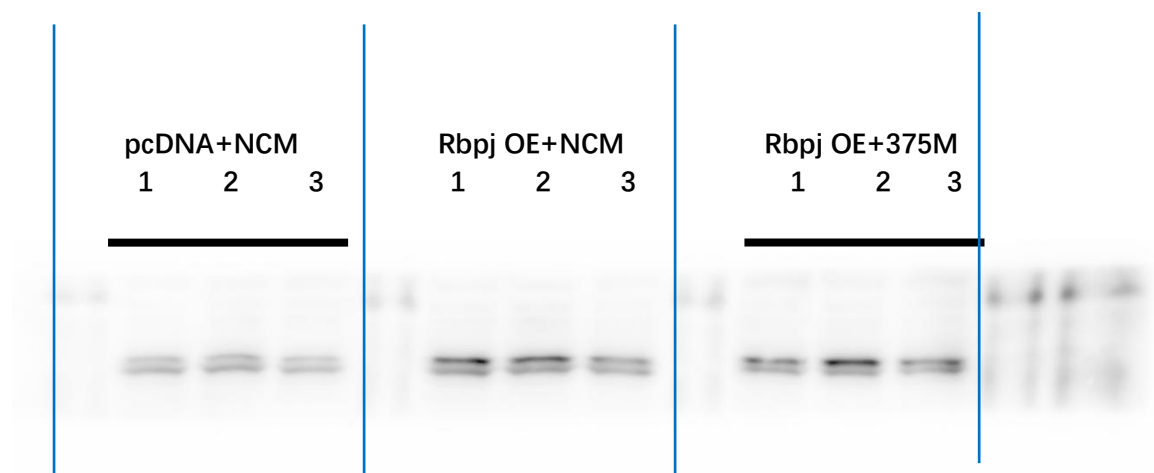


Figure 6G
RBPJ (MW:60KD)



β -actin (MW:45KD)

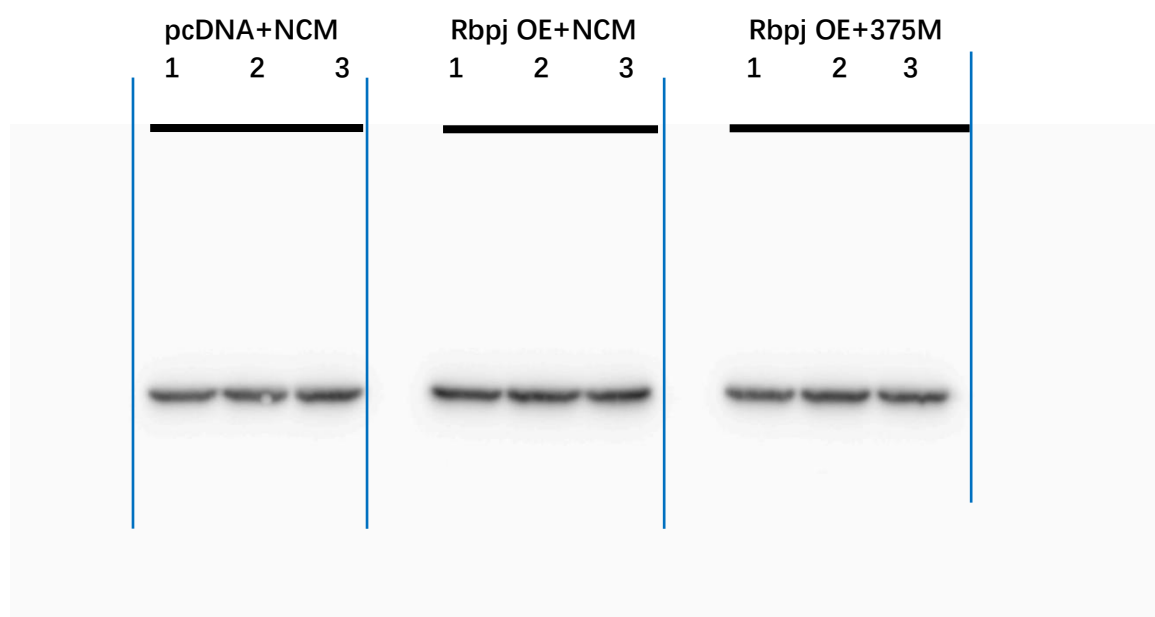
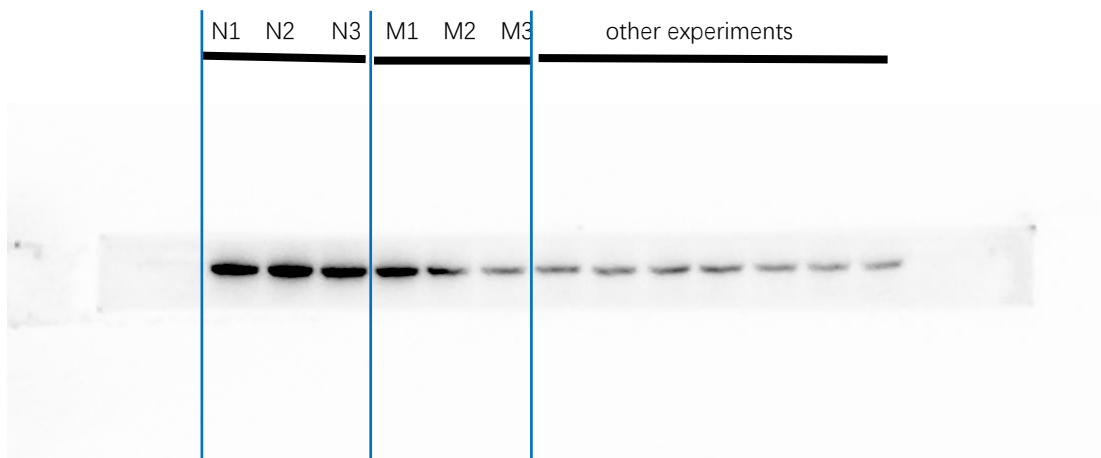


Figure 6L N:NCM(negative control mimics); M:375 mimics 3 repeats
RBPJ (MW:60KD)



β -actin (MW:45KD)

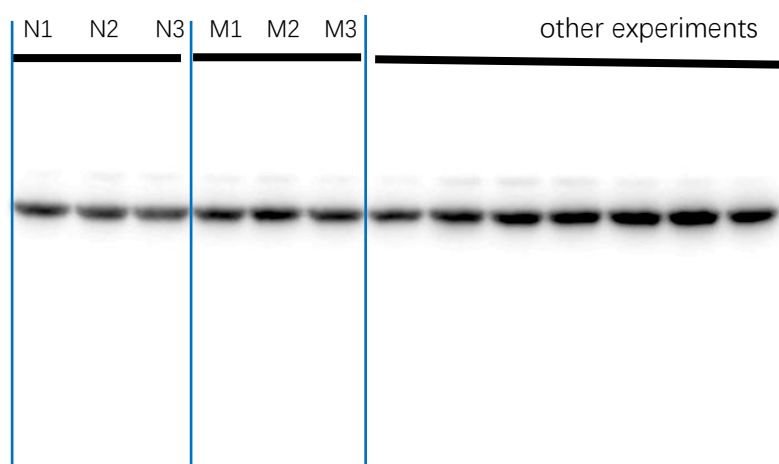
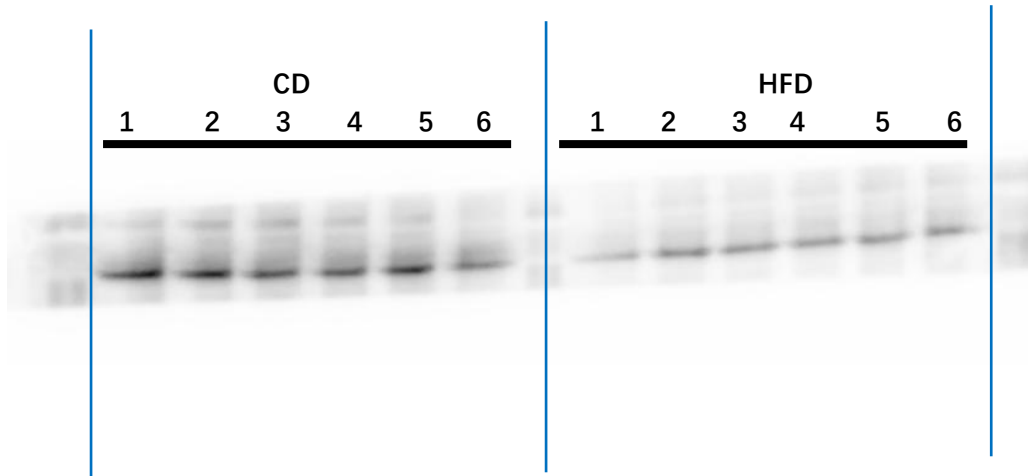


Figure 6O 3 repeats
RBPJ (MW:60KD)



β -actin (MW:45KD)

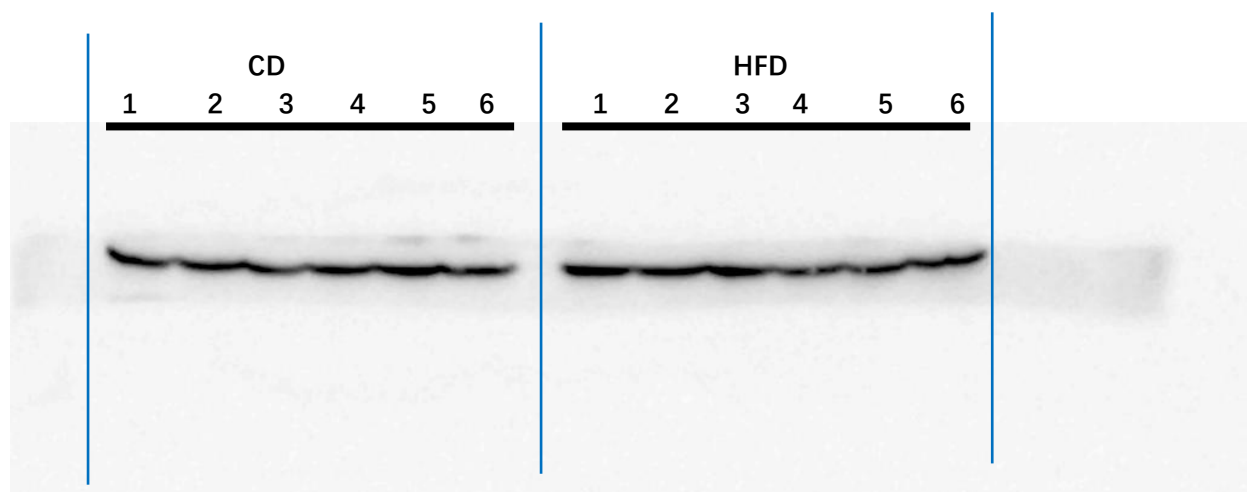
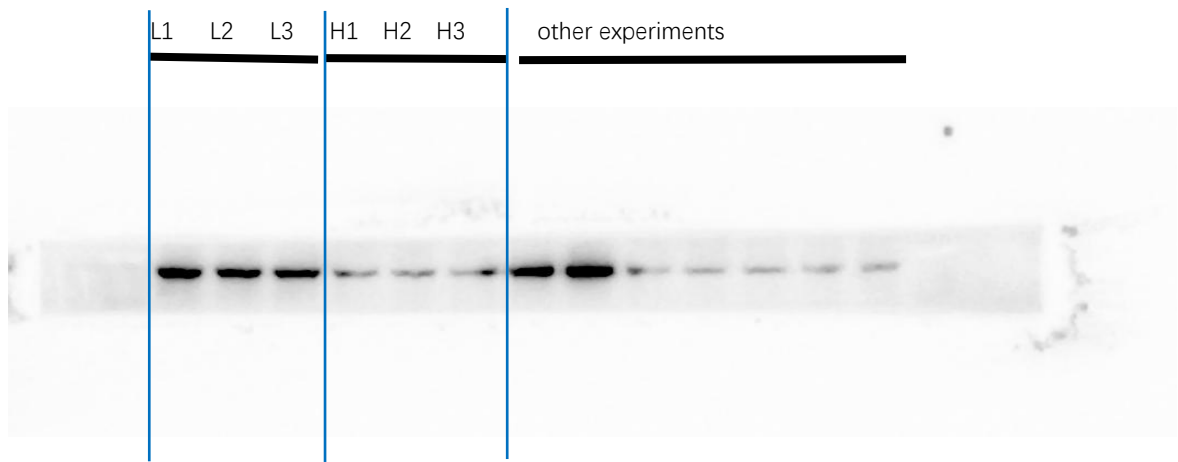


Figure 6R(L:L-Glu-MIN-6-Exos,H:H-Glu-MIN-6-Exos) 3 repeats

RBPJ (MW:60KD)



β -actin (MW:45KD)

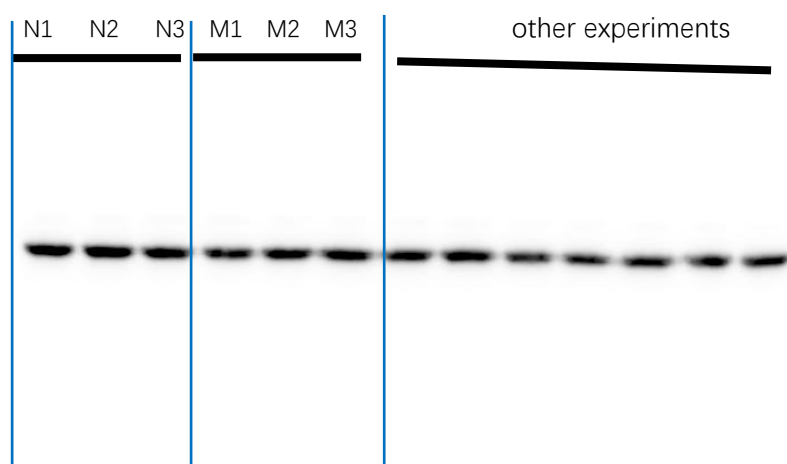
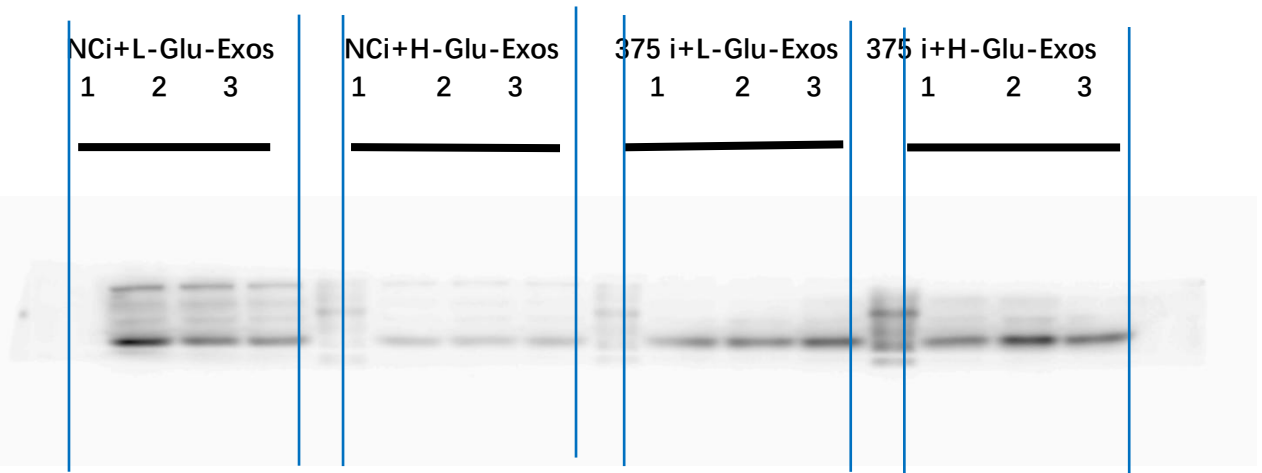


Figure 6T (NCi+L-Glu-Exos, NCi+H-Glu-Exos, 375i+L-Glu-Exos,375 i+H-Glu-Exos) 3 repeats RBPJ (MW:60KD)



β -actin (MW:45KD)

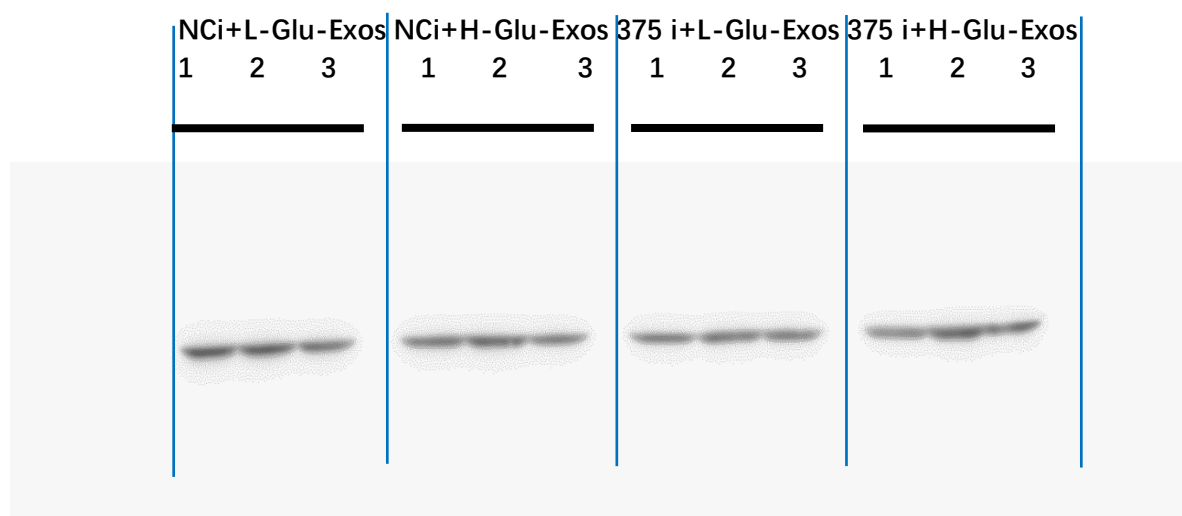


Table 1 Abbreviations

GSK	glycogen synthase kinase
TUNEL	terminal deoxynucleotidyl transferase dUTP nick-end
HFD	high-fat diet
CD	chow diet
IRS	insulin receptor substrate
Rbpj	recombination signal binding protein for immunoglobulin
AKT	protein kinase B
3'-UTR	3' untranslated region
qPCR	quantitative polymerase chain reaction analysis
PI3K	phosphoinositide 3 kinase
DMEM	Dulbecco's modified Eagle's medium
Exos	exosome
375i	miR-375-3p inhibitors
375m	miR-375-3p mimics
NCi	negative control inhibitors
NCM	negative control mimics
IPC	islet primary cell
LPC	liver primary cell
H-Glu	high glucose
L-Glu	low glucose
PKD1	phosphatidylinositol 3-phosphate-dependent protein