## **Supplementary Figures**

Figure2

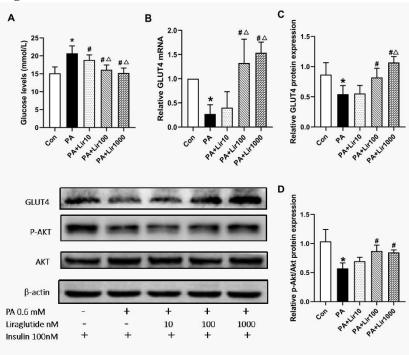
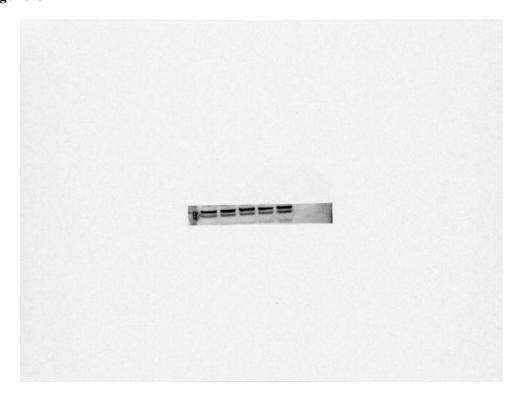


Figure S1



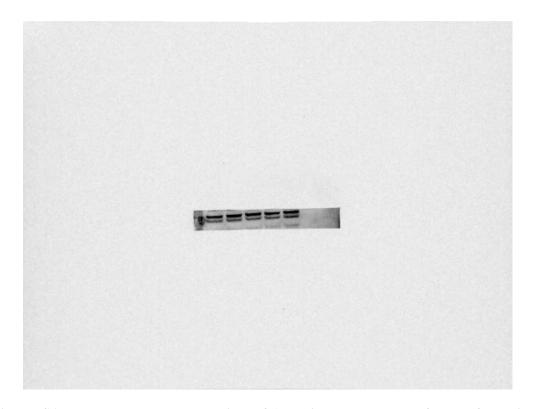


Figure S1 shows the gel and blotting of AKT in each group, from left to right are groups Con, PA, Lir10, Lir100 and Lir1000. (gels/blots of AKT in Figure 2)

Figure S2







Figure S2 shows the gel and blotting of GLUT4 in each group, from left to right are groups Con, PA, Lir10, Lir100 and Lir1000. (gels/blots of GLUT4 in Figure 2)

Figure S3

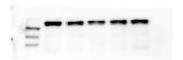






Figure S3 shows the gel and blotting of p-AKT in each group, from left to right are groups Con, PA, Lir10, Lir100 and Lir1000. (gels/blots of p-AKT in Figure 2)

Figure S4

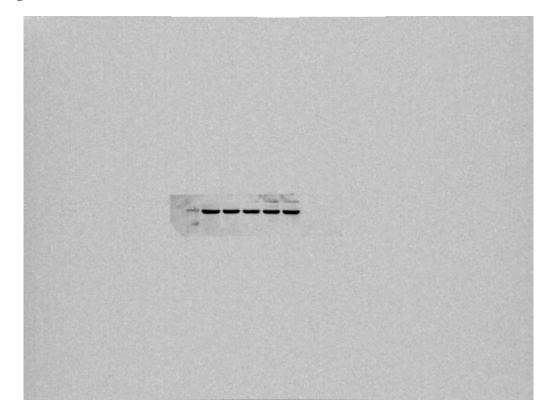


Figure S4 shows the gel and blotting of  $\beta$ -actin in each group, from left to right are groups Con, PA, Lir10, Lir100 and Lir1000. (gels/blots of  $\beta$ -actin in Figure 2)

Figure 3

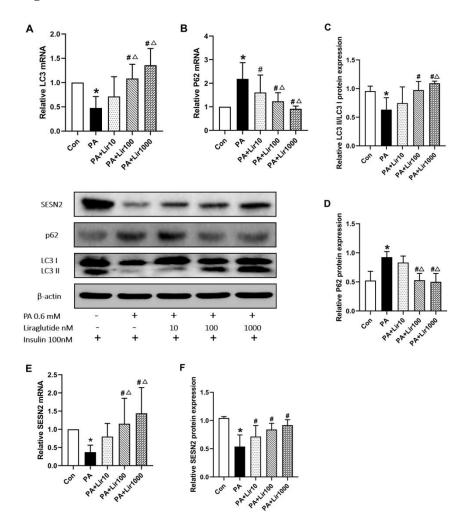


Figure S5



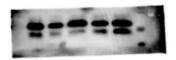




Figure S5 shows the gel and blotting of LC3 in each group, from left to right are groups Con, PA, Lir10, Lir100 and Lir1000. (gels/blots of LC3 in Figure 3)

Figure S6

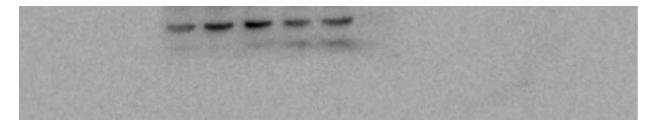
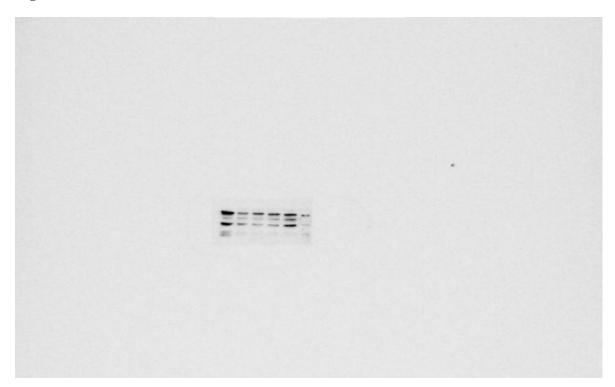


Figure S6 shows the gel and blotting of P62 in each group, from left to right are groups Con, PA, Lir10, Lir100 and Lir1000. (gels/blots of P62 in Figure 3)

Figure S7





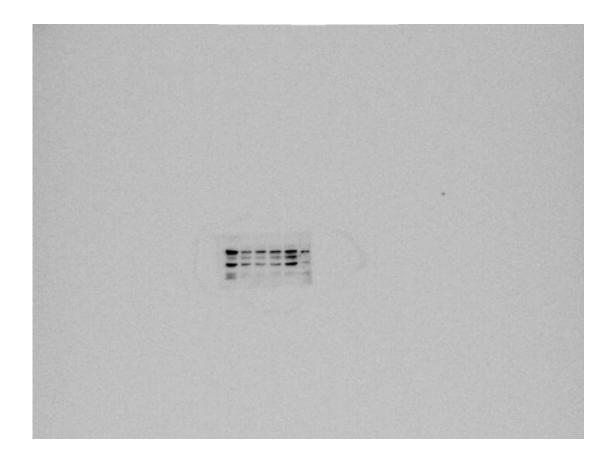


Figure S7 shows the gel and blotting of SESN2 in each group, from left to right are groups Con, PA, Lir10, Lir100 and Lir1000. (gels/blots of SESN2 in Figure 3)

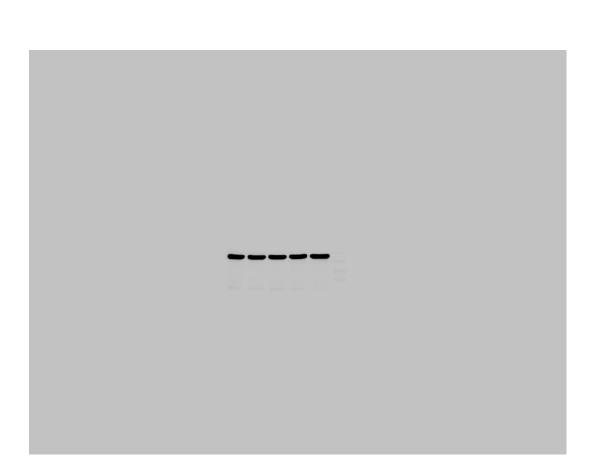
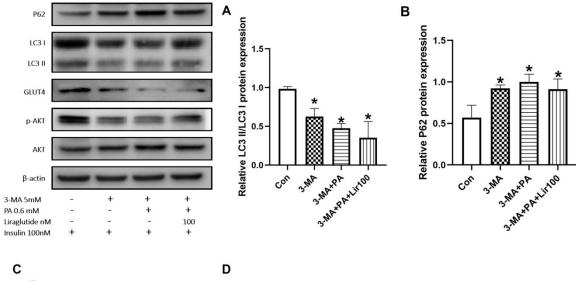


Figure S8 shows the gel and blotting of  $\beta$ -actin in each group, from left to right are groups Con, PA, Lir10, Lir100 and Lir1000. (gels/blots of  $\beta$ -actin in Figure 3)

Figure 4



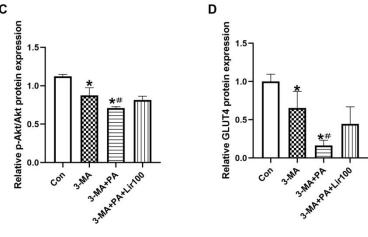


Figure S9

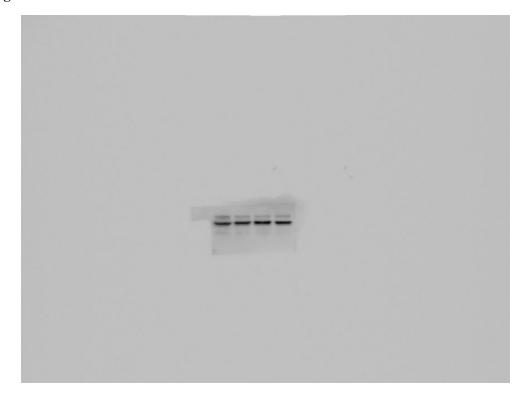


Figure S9 shows the gel and blotting of AKT in each group, from left to right are groups Con, 3-MA, 3-MA+PA and 3-MA+PA+Lir100. (gels/blots of AKT in Figure 4)



Figure S10 shows the gel and blotting of GLUT4 in each group, from left to right are groups Con, 3-MA, 3-MA+PA and 3-MA+PA+Lir100. (gels/blots of GLUT4 in Figure 4)

Figure S11



Figure S11 shows the gel and blotting of LC3 in each group, from left to right are groups Con, 3-MA, 3-MA+PA and 3-MA+PA+Lir100. (gels/blots of LC3 in Figure 4)

Figure S12



Figure S12 shows the gel and blotting of P62 in each group, from left to right are groups Con, 3-MA, 3-MA+PA and 3-MA+PA+Lir100. (gels/blots of P62 in Figure 4)

Figure S13



Figure S13 shows the gel and blotting of p-AKT in each group, from left to right are groups Con, 3-MA, 3-MA+PA and 3-MA+PA+Lir100. (gels/blots of p-AKT in Figure 4)

Figure S14



Figure S14 shows the gel and blotting of  $\beta$ -actin in each group, from left to right are groups Con, 3-MA, 3-MA+PA and 3-MA+PA+Lir100. (gels/blots of  $\beta$ -actin in Figure 4)

Figure 5

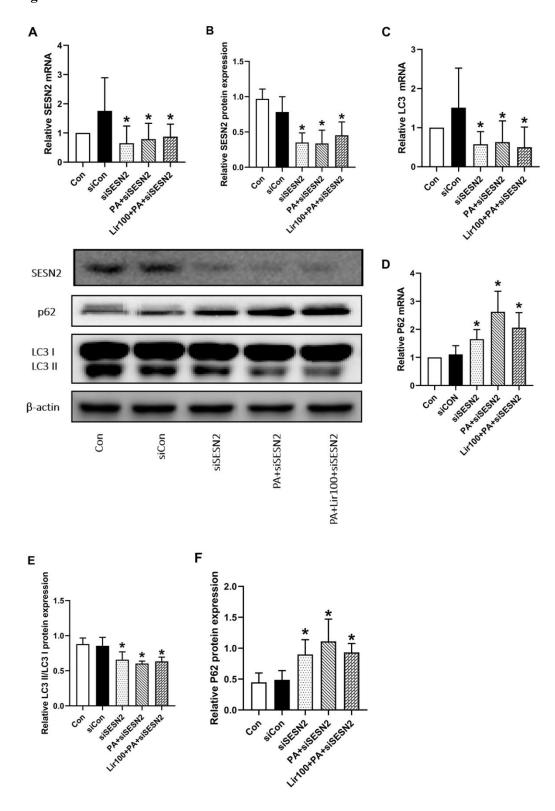
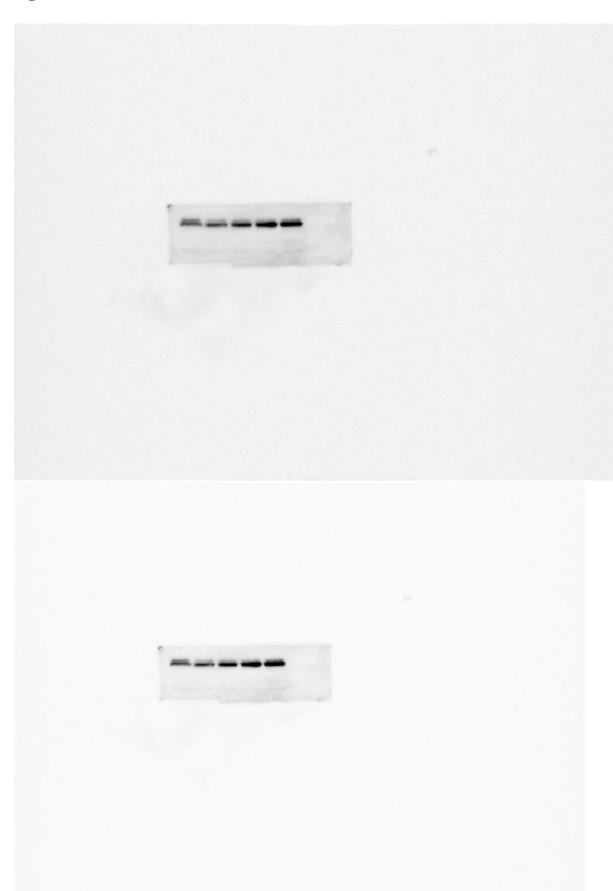




Figure S15 shows the gel and blotting of LC3 in each group, from left to right are groups Con, siCon, siSESN2, PA+siSESN2, and Lir100+PA+siSESN2. (gels/blots of LC3 in Figure 5)

Figure S16



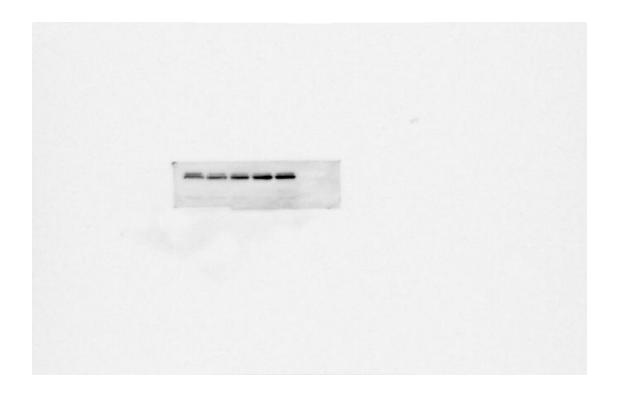


Figure S16 shows the gel and blotting of P62 in each group, from left to right are groups Con, siCon, siSESN2, PA+siSESN2, and Lir100+PA+siSESN2. (gels/blots of P62 in Figure 5)

Figure S17

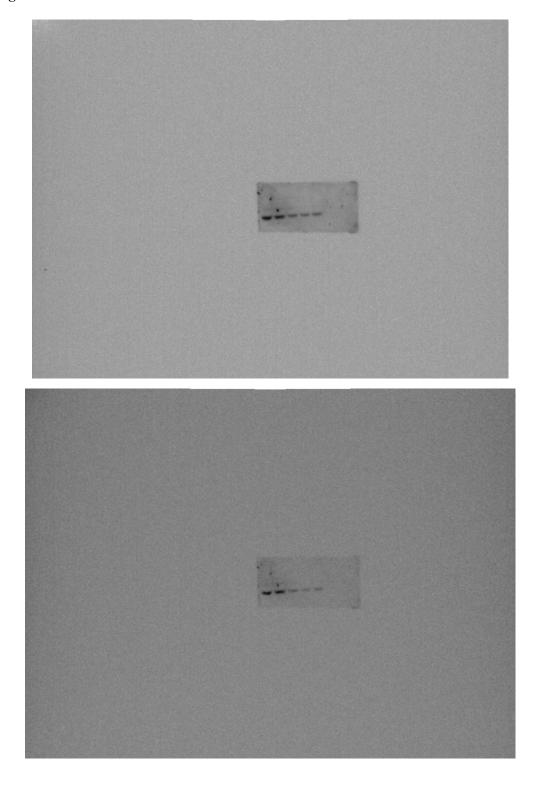


Figure S17 shows the gel and blotting of SESN2 in each group, from left to right are groups Con, siCon, siSESN2, PA+siSESN2, and Lir100+PA+siSESN2. (gels/blots of SESN2 in Figure 5)

Figure S18



Figure S18 shows the gel and blotting of  $\beta$ -actin in each group, from left to right are groups Con, siCon, siSESN2, PA+siSESN2, and Lir100+PA+siSESN2. (gels/blots of  $\beta$ -actin in Figure 5)

Figure 6

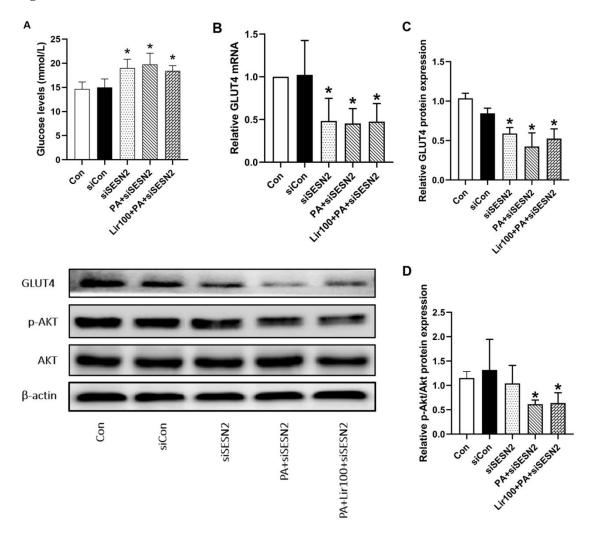


Figure S19



Figure S19 shows the gel and blotting of AKT in each group, from left to right are groups Con, siCon, siSESN2, PA+siSESN2, and Lir100+PA+siSESN2. (gels/blots of AKT in Figure 6)

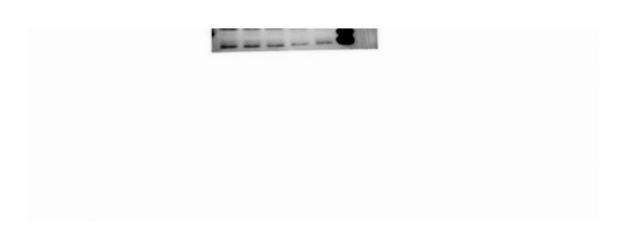


Figure S20 shows the gel and blotting of GLUT4 in each group, from left to right are groups Con, siCon, siSESN2, PA+siSESN2, and Lir100+PA+siSESN2. (gels/blots of GLUT4 in Figure 6)

## Figure S21





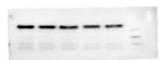


Figure S21 shows the gel and blotting of p-AKT in each group, from left to right are groups Con, siCon, siSESN2, PA+siSESN2, and Lir100+PA+siSESN2. (gels/blots of p-AKT in Figure 6)

## Figure S22



Figure S22 shows the gel and blotting of  $\beta$ -actin in each group, from left to right are groups Con, siCon, siSESN2, PA+siSESN2, and Lir100+PA+siSESN2. (gels/blots of  $\beta$ -actin in Figure 6)