

Supplementary Materials

Table S1. Composition of feed.

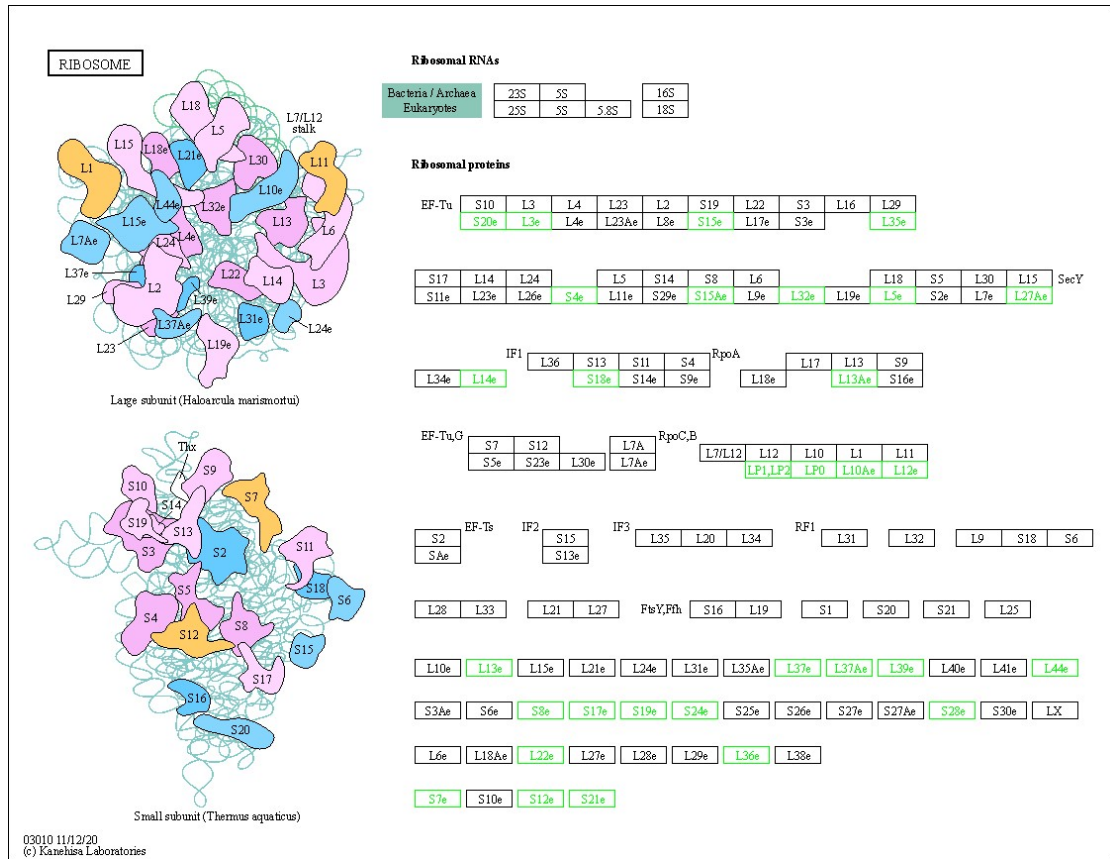
| Ingredients | OA diet | SA diet |
|--------------------------------|----------------|----------------|
| Corn (%) | 38.214 | 37.855 |
| Secondary powder (%) | 19.533 | 19.349 |
| Flour (%) | 14.650 | 14.512 |
| Soybean meal (%) | 15.629 | 15.482 |
| Fish meal (%) | 3.903 | 3.867 |
| Stone powder (%) | 1.462 | 1.448 |
| Calcium hydrogen phosphate (%) | 1.952 | 1.933 |
| Salt (%) | 0.289 | 0.286 |
| Minerals (%) | 0.077 | 0.076 |
| Vitamins (%) | 0.034 | 0.033 |
| Choline (%) | 0.048 | 0.048 |
| Vitamin E (%) | 0.010 | 0.010 |
| Oleic acid (%) | 4.200 | 0.000 |
| Stearic acid (%) | 0.000 | 5.100 |

Table S2. PCR Primers for genes.

| genes | Forward primer (5'-3') | Reverse primer (5'-3') |
|----------------|-------------------------------|-------------------------------|
| ACACA | GATGAACCATCTCCGTTGGC | GACCCAATTATGAATCGGGAGT G |
| ACACB | CGCTCACCAACAGTAAGGTGG | GCTTGGCAGGGAGTTCCTC |
| ACSL5 | TCCTGACGTTTGGAACGGC | CTCCCTCAATCCCCACAGAC |
| ADD1 | CCAGGGACGACAGTGATGC | AGGGGAGGCTACCTCTTCAG |
| AP-2 β | GCGTCCCAAGCCATAGCTC | ACTCTGGTGGTAGGGTAGCG |
| ATGL | GAACAAAGCACAACTTCTGAGC | CCGCGAGTATCAGGAGAGC |
| CD36 | ATGGGCTGTGATCGGAACTG | GTCTTCCAATAAGCATGTCT CC |
| C/EBP α | CAAGAACAGCAACGAGTACCG | GTCACTGGTCAACTCCAGCAC |
| CYP3A11 | GTGCTCCTAGCAATCAGCTT | CAGTGCCTAAAAATGGCAGAGG |
| CYP3A13 | GACGATTCTTGCTTACCAGAAG G | CCGGTTTGTGAAGGTAGAGTAA C |
| FASN | GGAGGTGGTGATAGCCGGTAT | TGGGTAATCCATAGAGCCCAG |
| FATP1 | CGCTTTCTGCGTATCGTCTG | GATGCACGGGATCGTGTCT |
| FATP2 | TCCTCCAAGATGTGCGGTACT | TAGGTGAGCGTCTCGTCTCG |
| FATP3 | GGCCCGGATTTCTTTGGATT | CCCATAGGTGGAGCCCCAT |
| FATP4 | ACTGTTCTCCAAGCTAGTGCT | GATGAAGACCCGGATGAAACG |
| FATP5 | CTACGCTGGCTGCATATAGATG | CCACAAAGGTCTCTGGAGGAT |
| FOSL2 | CCAGCAGAAGTTCGGGGTAG | GTAGGGATGTGAGCGTGGATA |

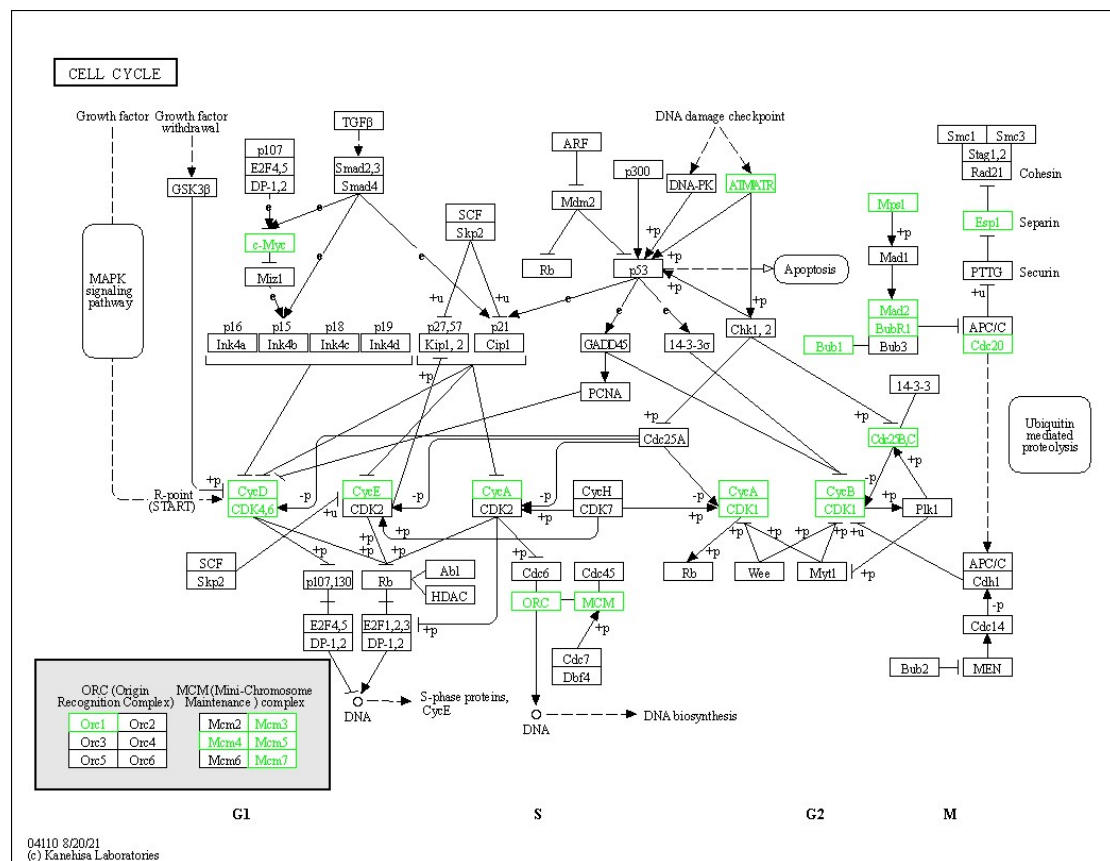
| | | |
|----------------|-------------------------|-------------------------|
| GPR40 | GCTTCCATTGAACTTGTTAGCC | CGCTGAGAGCAGCTAGGAAG |
| GPR41 | CTTGATCCTCACGGCCTACAT | CCAGGGTCAGATTAAGCAGGAG |
| GPR43 | CTTCTTTCTTGGCAATTACTGGC | CCGAAATGGTCAGGTTTAGCAA |
| GPR120 | ACCAAGTCAATCGCACCCAC | GTGAGACGACAAAGATGAGCC |
| HSL | TCCCTCAGTATCTAGGCCAGA | GGCTCATTTGGGAGACTTTGTTT |
| Leptin | GAGACCCCTGTGTCGGTTC | CTGCGTGTGTGAAATGTCATTG |
| SCD1 | TTCTTGCGATACTCTGGTGC | CGGGATTGAATGTTCTTGTCGT |
| OSBP | AATGAACGAGCCACGCTTTTT | CTGGGCTAACATGAGGAAATCT |
| | | C |
| SREBP1 | TGACCCGGCTATTCCGTGA | CTGGGCTGAGCAATACAGTTC |
| β -actin | GGCTGTATTCCCCTCCATCG | CCAGTTGGTAACAATGCCATGT |

Fig. S1 Expression of ribosome production related genes in enterocyte of mice.



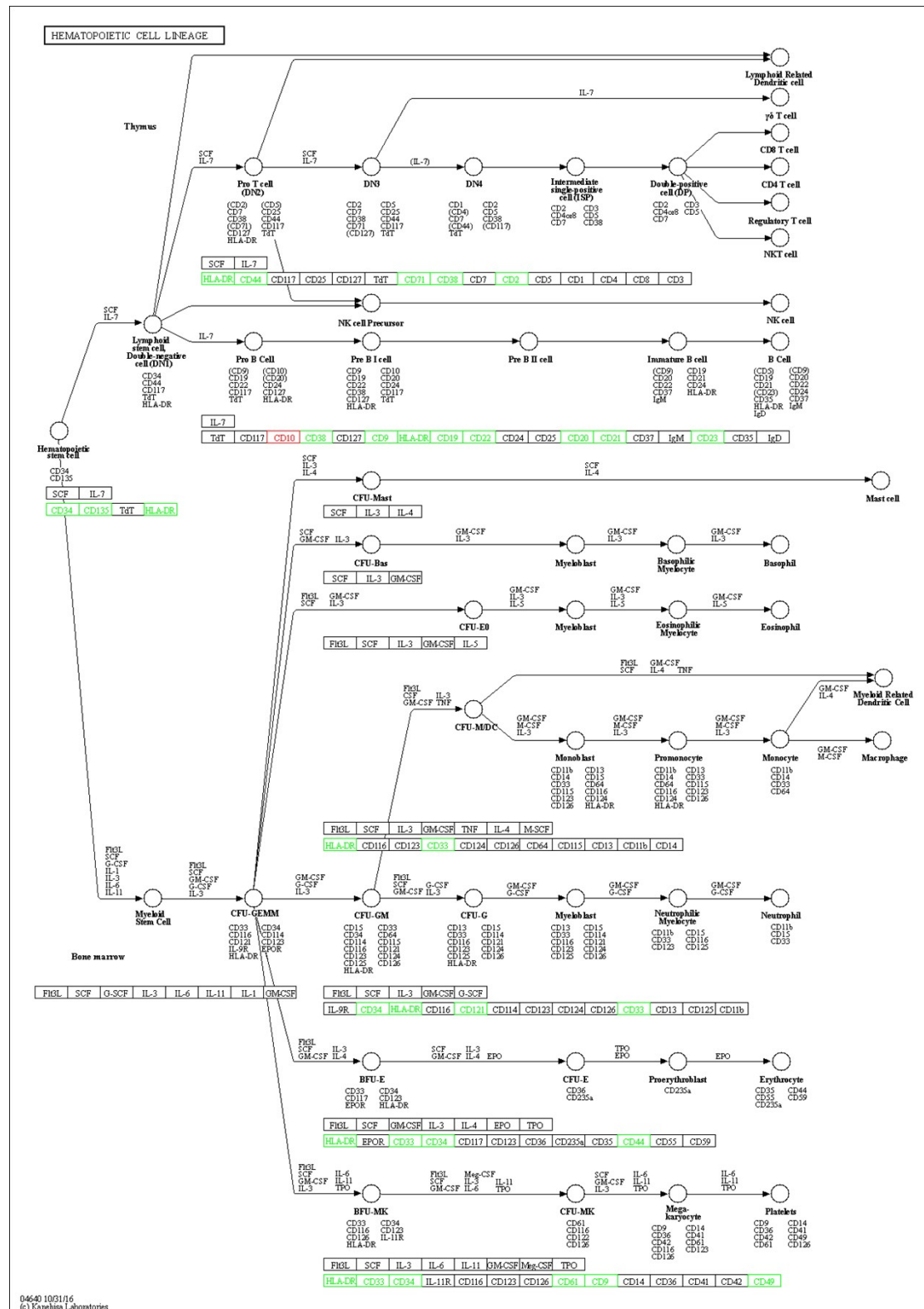
Note: green represents low-expressed genes.

Fig. S2 Expression of cell cycle related genes in enterocyte of mice.



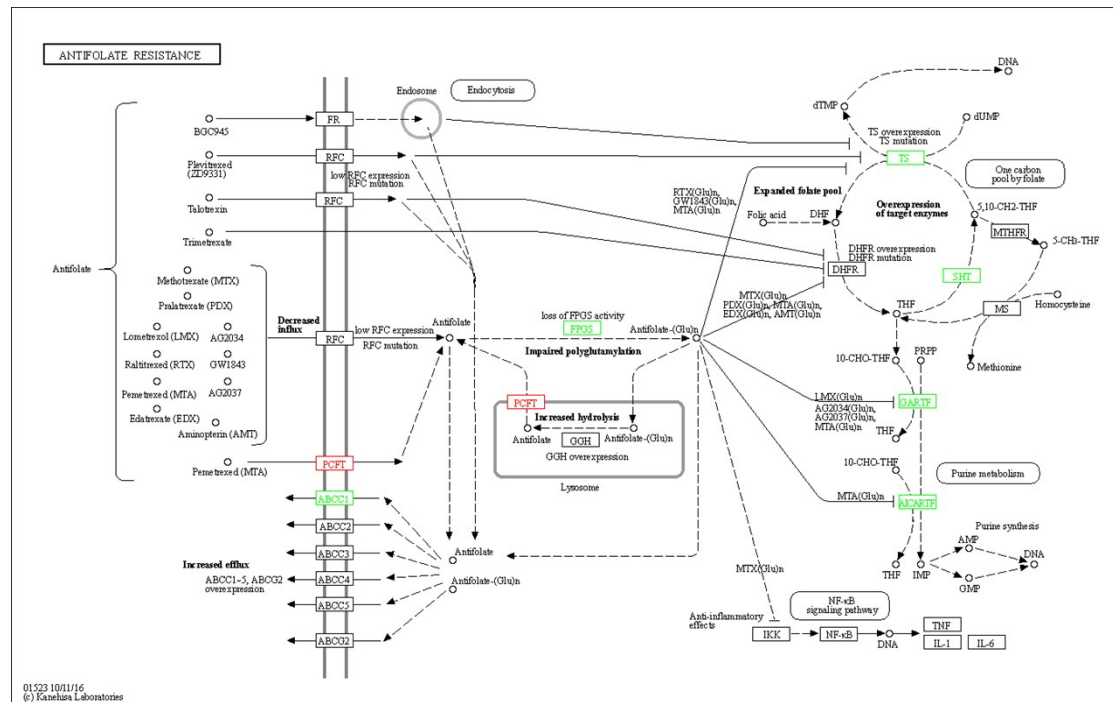
Note: green represents low-expressed genes.

Fig. S3 Expression of hematopoietic cell lineage related genes in enterocyte of mice.



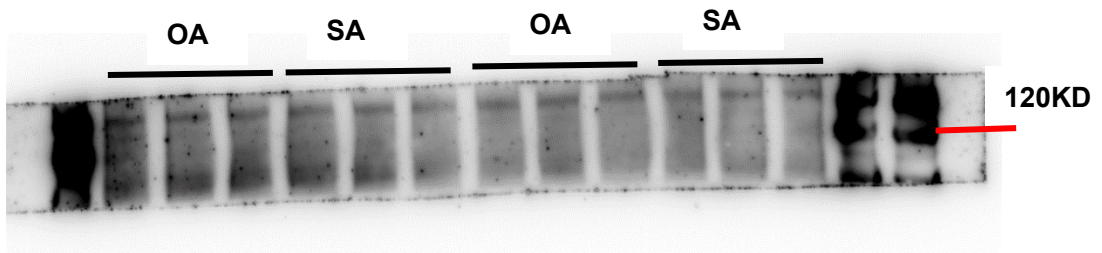
Note: red represents high-expressed genes, and green represents low-expressed genes.

Fig. S4 Expression of antifolate resistance related genes in enterocyte of mice.

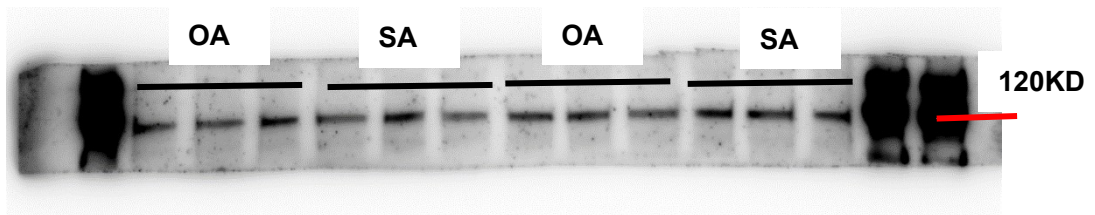


Note: red represents high-expressed genes, and green represents low-expressed genes.

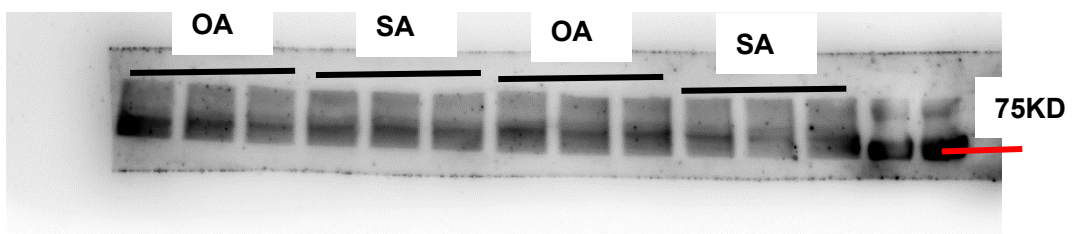
Western blot image:



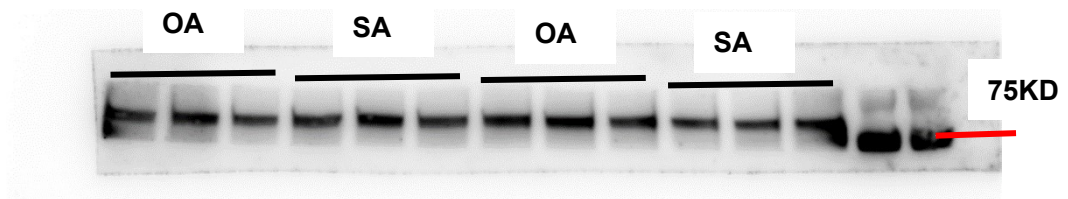
#1: p-JAK2



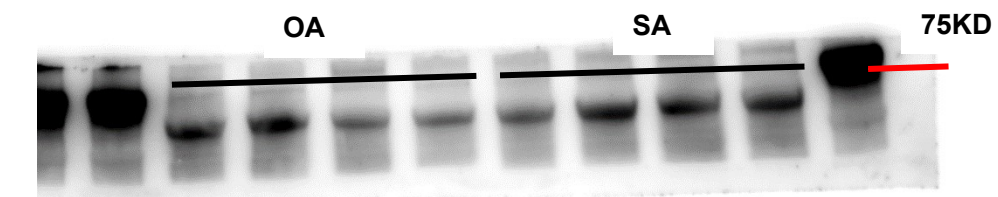
#2: JAK2



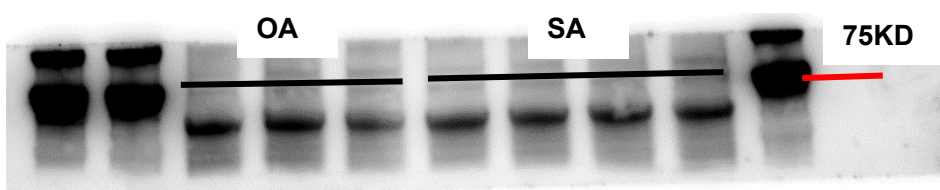
#3: p-STAT3



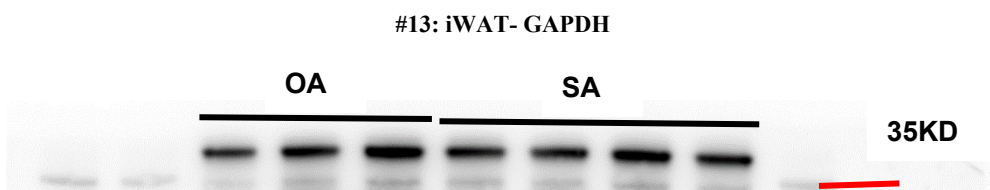
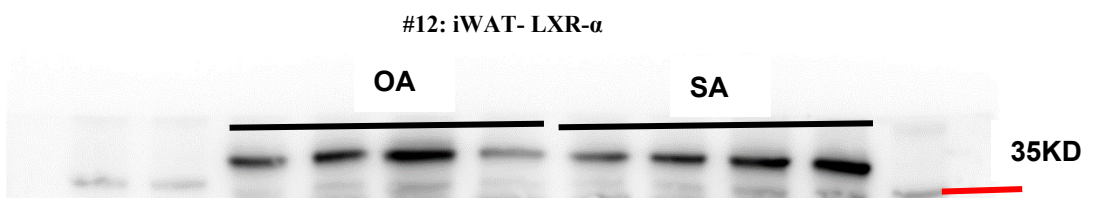
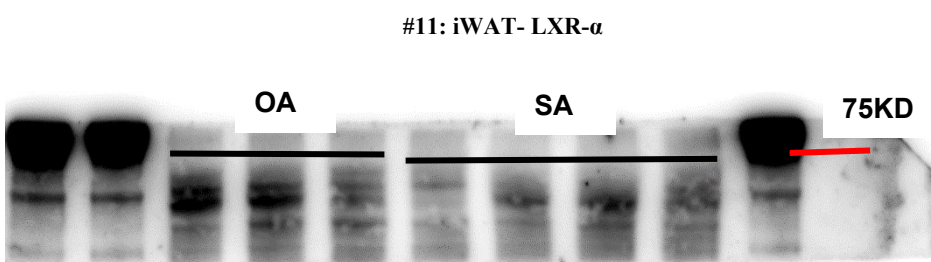
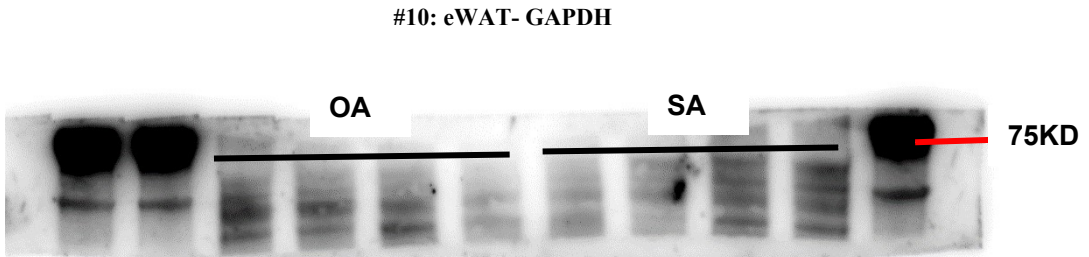
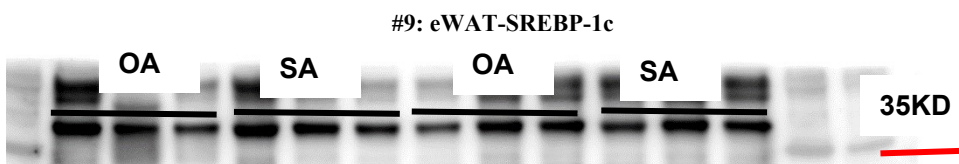
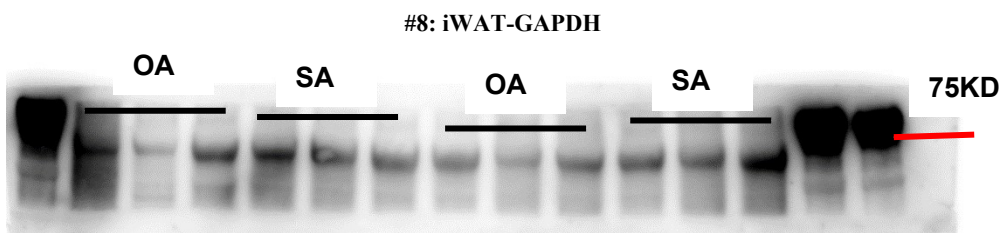
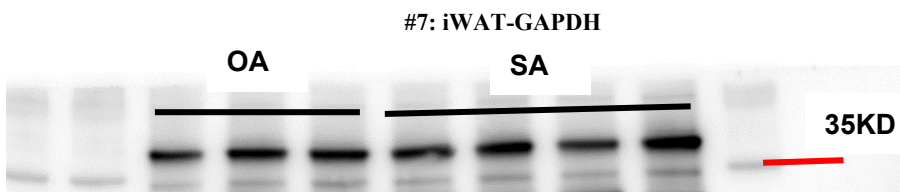
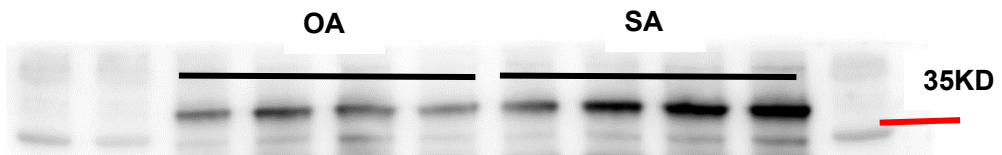
#4: STAT3



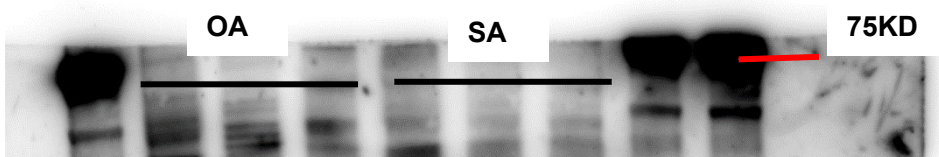
#5: iWAT-SREBP-1c



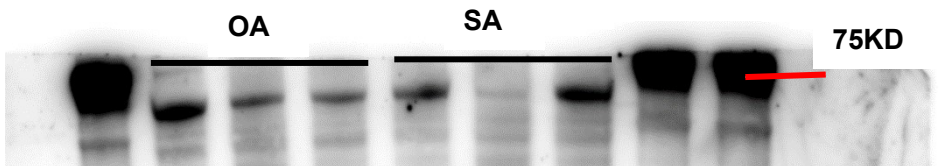
#6: iWAT-SREBP-1c



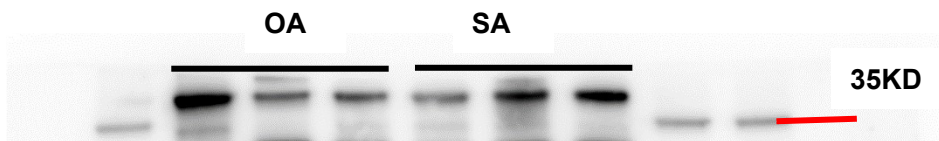
#14: iWAT- GAPDH



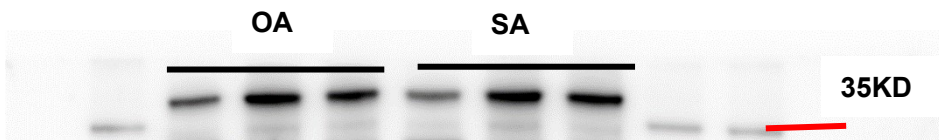
#15: eWAT- LXR- α



#16: eWAT- LXR- α



#17: eWAT- GAPDH



#18: eWAT- GAPDH