

Supplement materials

Table 1. Primer sequences for RT-qPCR.

Gene	Forward primer	Reverse primer
Mouse IL-6	TCCTACCCCAACCTCCAATGCTC	TTTGGAGGTCTTGGTCCTTAGCC
Mouse IL-8	TCGAGACCATTCTACTGCAACAG	CATTGCCGGTGGAAATTCCTT
Mouse ICAM	AGGTGTGATATCCGGTAGAT	CCTTCTAAGTGGTTTTTGAACA
Mouse IL-1 β	TGTGATGTTCCCATTAGAC	TGTGATGTTCCCATTAGAC
Mouse TNF- α	CCCAGGAGAAAGTCAGCCTCCT	TCATACCAGGGCTTGAGCTCA
Mouse β -actin	ACACCCGCCACCAGTTCGC	TCTGGGCCTCGTCACCCACAI
Mouse GAPDH	ACCCTTAAGAGGGATGCTGC	CCCAATACGGCCAAATCCGT
Human IL-6	ATGAGGAGACTTGCCTGGTG	GTGAGGAACAAGCCAGAGCT
Human IL-8	GAAGTTTTTGAAGAGGGCTGAGA	TGCTTGAAGTTTCACTGGCATC
Human ICAM	ATGGCAACGACTCCTTCTCG	ATGGCAACGACTCCTTCTCG
Human IL-1 β	TCTTCATTGCTCAAGTGTCTG	TGCCACTGTAATAAGCCATC
Human TNF- α	AGCCCATGTTGTAGCAAACC	ATGAGGTACAGGCCCTCTGA
Human β -actin	CCTGACTGACTACCTCATGAAG	GACGTAGCACAGCTTCTCCTTA
Human GAPDH	GGGAAGGTGAAGGTCGGAGT	GGGGTCATT GATGGC AACA
Human 5-LOX	CGGCACTGACGACTACATCT	TATGAATCCACCGCGCCAC
Human 12-LOX	GAAGAGTGCCCTGGCTGAGAAG	TTCTCCAGTTGAGCCTGAAGC
Human 15-LOX	ATTCCCCACCTGCGATACAC	CCAGTGCTCATTATCTGGTCG
Human CYP2C9	TGCCTTTCTCAGCAGGAAAAC	AAAGAGAGCTGCAGGGACTG
Human CYPJ2	TCGGACTCTCCTACTGGGC	GTTCCCATATTTCTTCACAAACAGC
Human CYP2C18	CCCTGGACATGAACAGTGCT	TCCTGGACTTTAGCTGTGACC
Human CYP2C19	GCCTTTCTCAGCAGGAAAAC	AGACCATCTGTGCTTCTTCAG

Figure captions

Figure S1. Body weight gain and average daily food intake in long-term high-fat diet intervention. (A) Body weight gain and (B) average daily food intake per cage in C57BL/6J mice fed a high-fat diet for 12 weeks under different treatment regimens. Data are presented as mean \pm SEM ($n = 10$ for body weight; $n = 2$ cages per group for food intake). ^{a-c} Means with different letters differ significantly at $P < 0.05$.

Figure S2. Effect of combined CLB-enriched orbitides and ALA intervention on NF- κ B activation in vascular tissue of HFD-fed mice. (A) Representative immunohistochemical images of NF- κ B in aortic sections. (B) Quantitative analysis of NF- κ B immunoreactivity. Data are expressed as mean \pm SEM ($n = 3$); ^{a, b} Means with different letters differ significantly at $P < 0.05$.

Figure S3. Dose-dependent effects of CLB on ALA-metabolizing enzyme expression in HUVECs. (A-G) mRNA levels of 5-LOX, 12-LOX, 15-LOX, CYP2C9, CYP2C18, CYP2C19, and CYP2J2 in HUVECs treated with ALA and varying CLB concentrations. Data expressed as mean \pm SEM ($n=3-4$); ^{a, b} Means with different letters differ significantly at $P < 0.05$.

Figure S4. Individual effects of ALA or CLB on anti-vascular inflammation. (A) Protein level of IL-6 in cell culture supernatant from HUVECs treated with ALA, as determined by ELISA. (B) Protein level of IL-6 in cell culture supernatant from HUVECs treated with CLB, as determined by ELISA. Data expressed as mean \pm SEM ($n=4$); ^{a-c} Means with different letters differ significantly at $P < 0.05$.

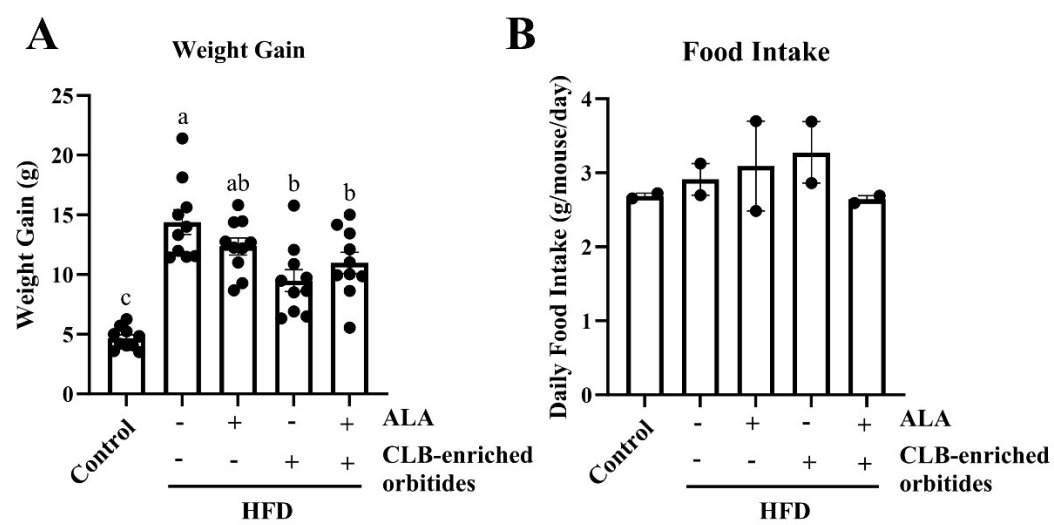


Figure S1

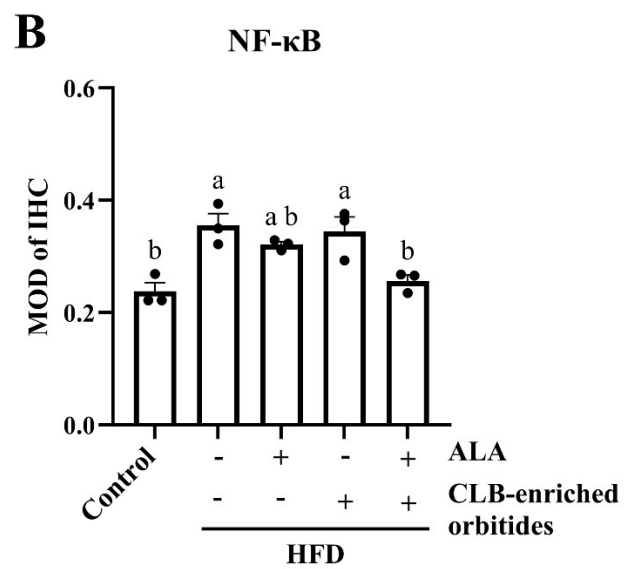
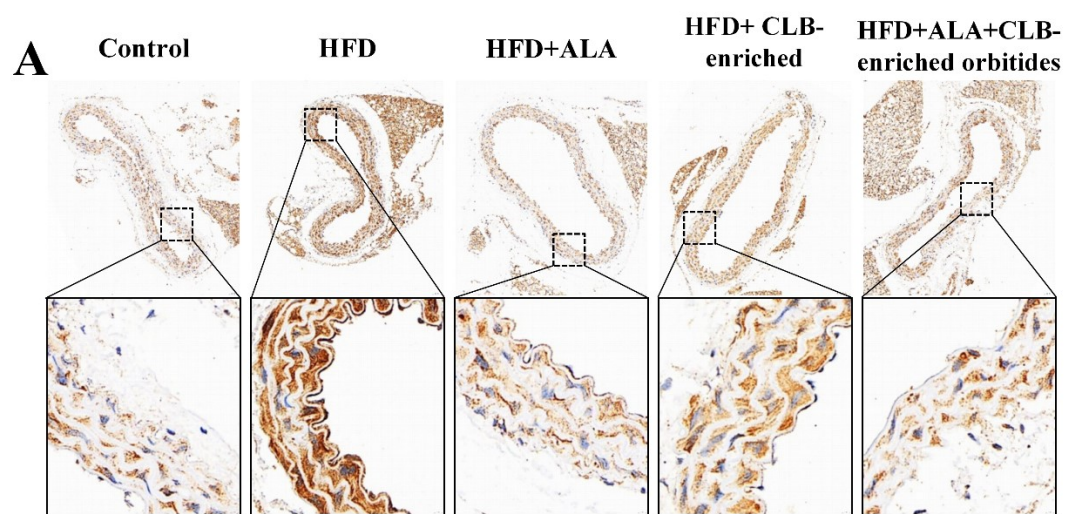


Figure S2

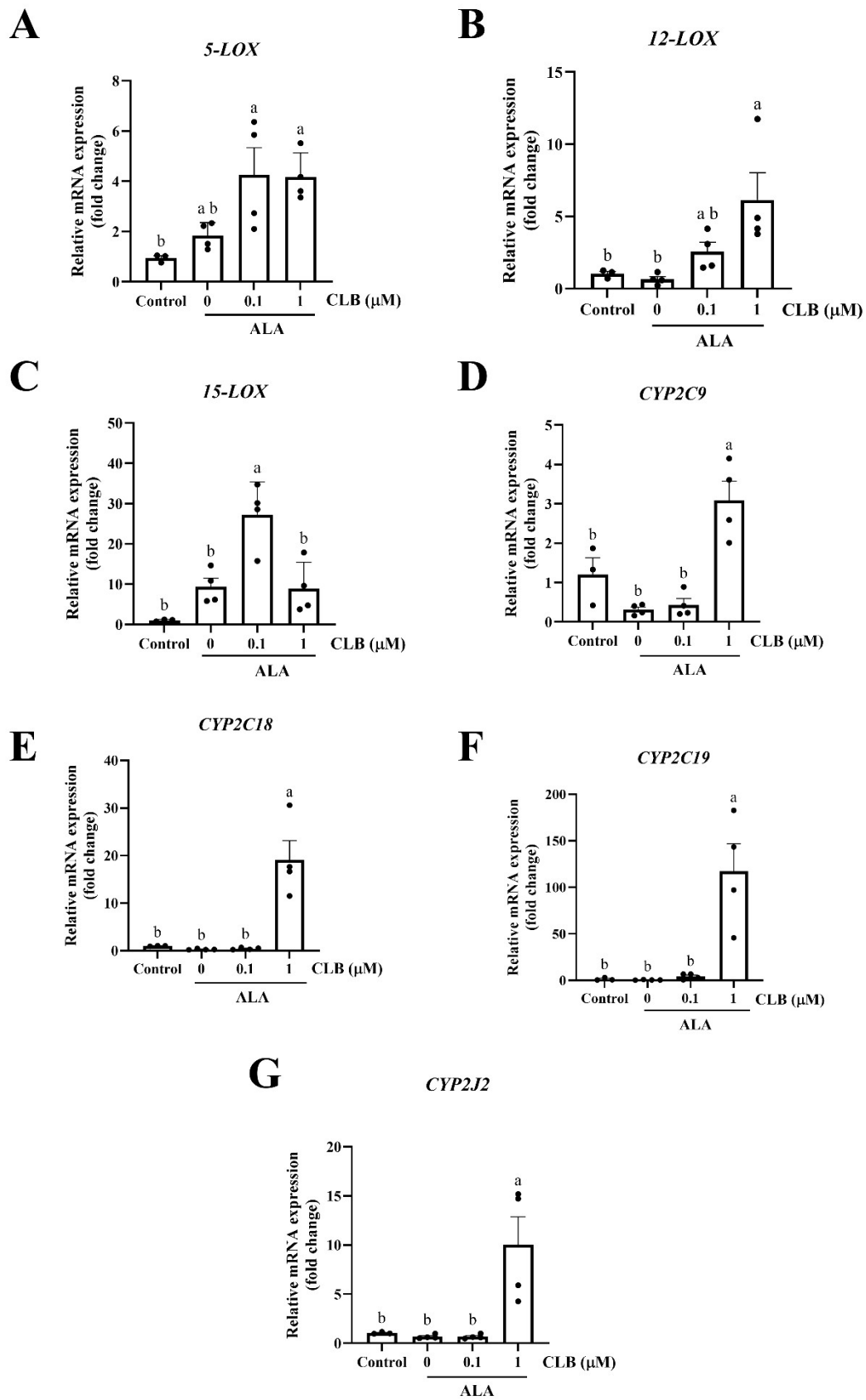
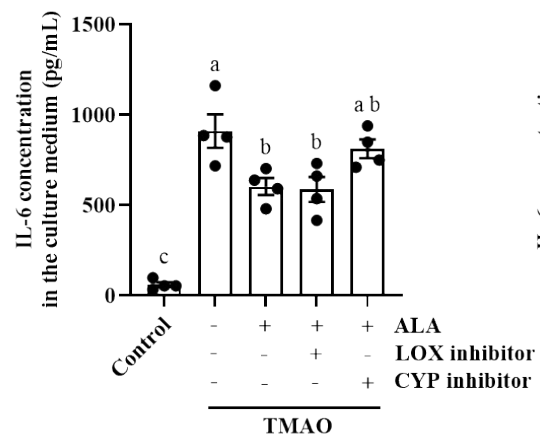
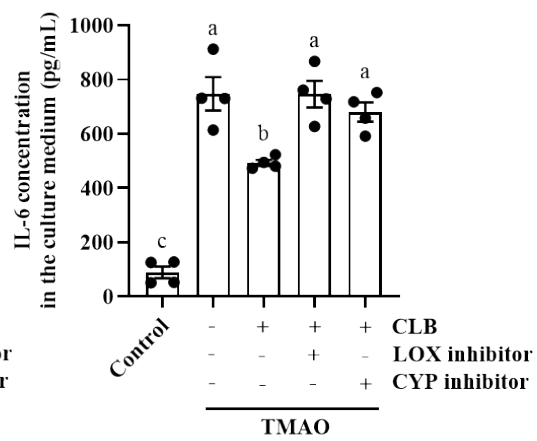


Figure S3

A



B



Fi

figure S4