

Figure S1. Lean mass in response to FOLFIRI. Lean mass net area under the curve quantified for females (♀) and males (♂). Data represent mean ± SD, *P < 0.05, as assessed by unpaired two-tailed *t* test.

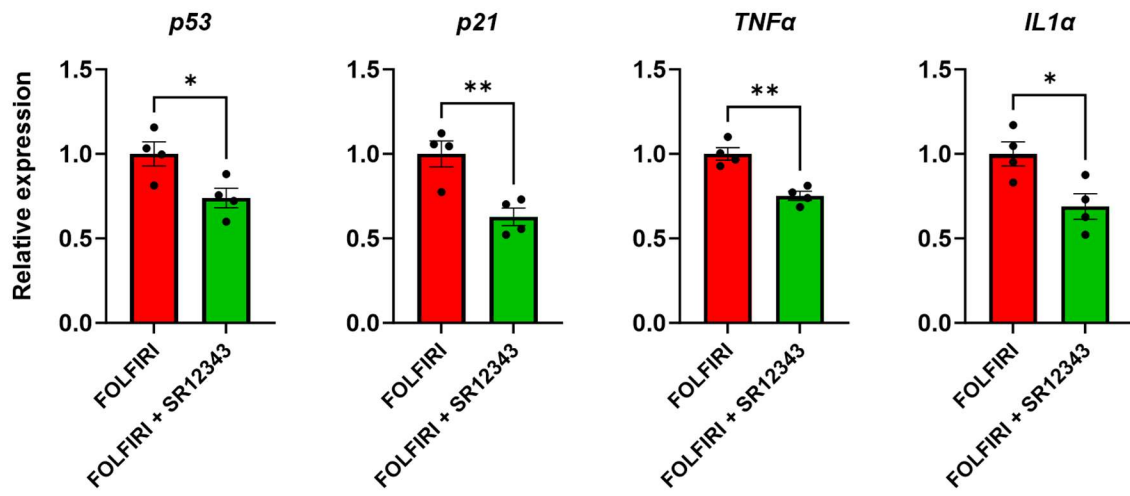


Figure S2. SR12343 reduces markers of cellular senescence in C2C12 myotubes.

Markers of senescence assessed by RT-qPCR. Data represent mean \pm SD. *P < 0.05;

**P < 0.01, as assessed by unpaired two-tailed t test.

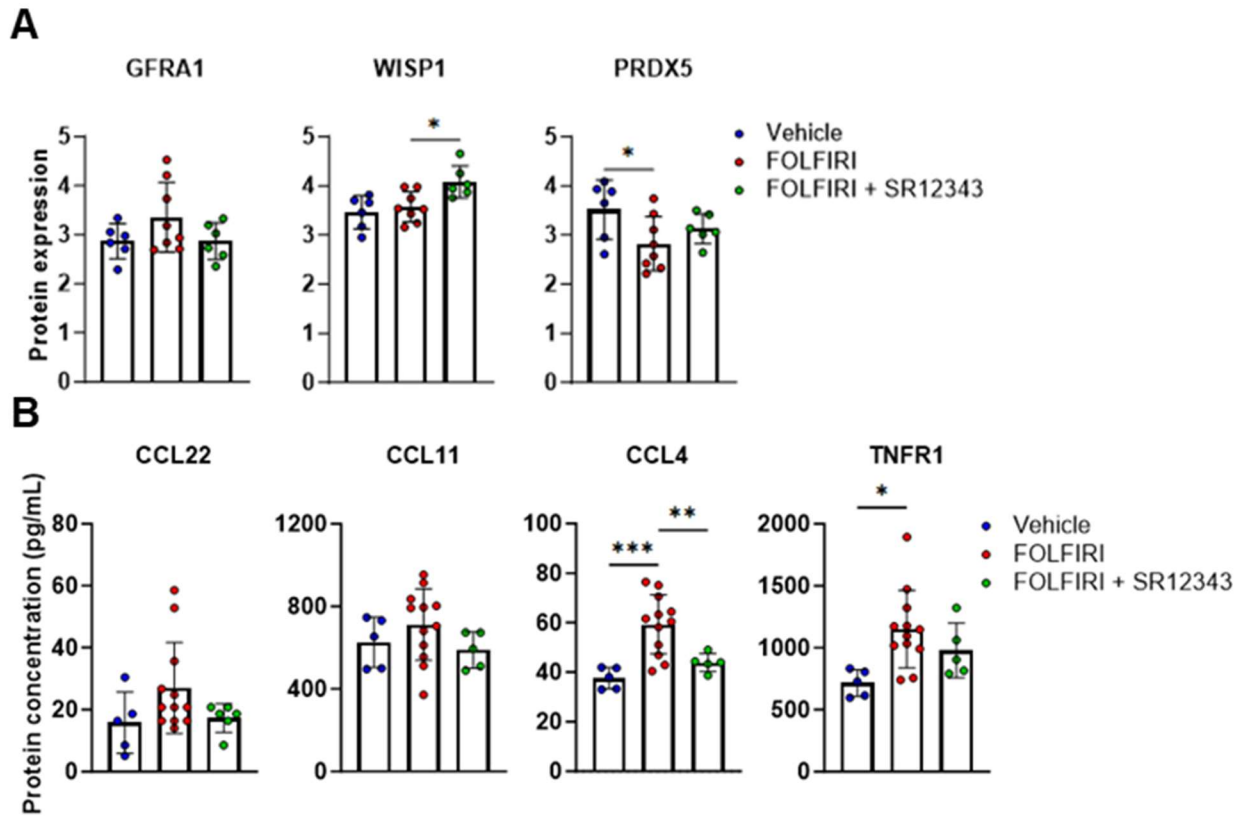


Figure S3. Circulating factors in response to FOLFIRI and SR12343. Circulating proteins assessed by the (A) Olink multiplex immunoassay and (B) ELLA and Magpix multiplex platforms. Data represent mean \pm SD. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$, as assessed by one-way ANOVA with a Šidák correction.

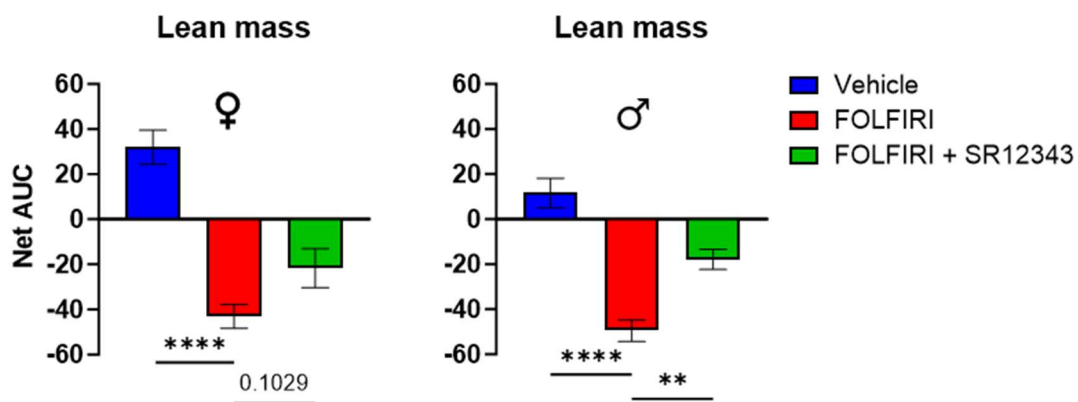


Figure S4. Lean mass in response to FOLFIRI and SR12343. Lean mass net area under the curve quantified for females (♀) and males (♂). Data represent mean \pm SD. **P < 0.01; ****P < 0.0001, as assessed by one-way ANOVA with a Šidák correction.

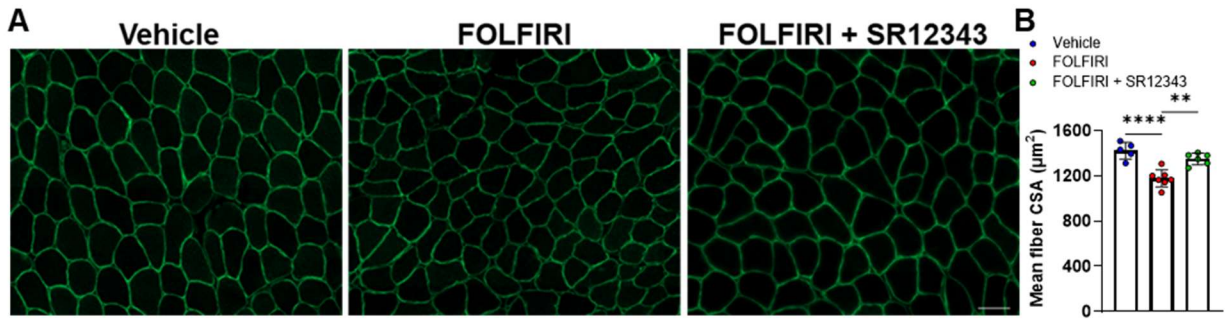


Figure S5. SR12343 attenuates muscle fiber atrophy in response to chemotherapy. (A) Representative immunofluorescence images of skeletal muscle cross sections stained for dystrophin; scale bar = 50 μm. (B) Quantification of mean skeletal muscle fiber cross-sectional area (CSA). Data represent mean ± SD. **P < 0.01; ***P < 0.0001, as assessed by one-way ANOVAs with a Šidák correction.

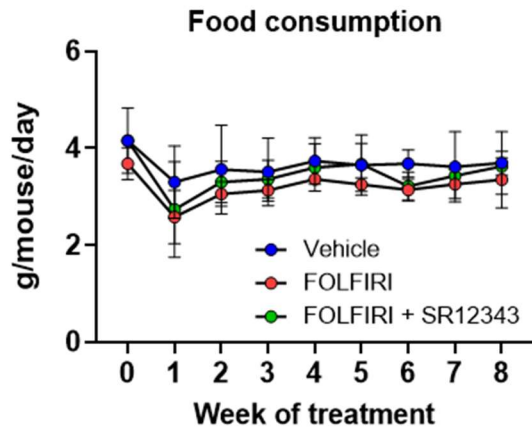


Figure S6. Drug treatments did not lead to between-group differences in food consumption. Longitudinal measurements of food consumption.

Supplemental Table 1

Gene	Probe (5'-3')	Primer 1 (5'-3')	Primer 2 (5'-3')
Ccl2	/56-FAM/ACTCACCTG/ZEN/CTGCTACTCATTACCC/3IABkFQ/	CATCCACGTGTTGGCTCA	AACTACAGCTTCTTTGGGACA
Cdkn1a	/56-FAM/TGTCTGAGC/ZEN/GGCCTGAAGATTCC/3IABkFQ/	AATCTGCGCTTGGAGTGATAG	CTTGTGCTGTCTTGCACT
Cdkn2a	/56-FAM/TGCACCGTA/ZEN/GTTGAGCAGAAGAGC/3IABkFQ/	GAGAAGGTAGTGGGGTCT	GAACTTTTCGGTCGTACCC
Cxcl1	/56-FAM/ATCCCTCTC/ZEN/GCAAGACGGTC/3IABkFQ/	TGATTTCAAGCTTCCCTATGGC	ATTTCTGCCTCATCTGCT
Igfbp7	/56-FAM/ATCCCAACC/ZEN/CCTGTCCTCATCTG/3IABkFQ/	AAGGTGTTCTTGAGCTGTGAG	CAAGAGTTCTGTCCGCTGAA
Il1α	/56-FAM/CCATCCAAC/ZEN/CCAGATCAGCACCT/3IABkFQ/	CTGCAGTCCATAACCCATGA	ACAAACTTCTGCCTGACGAG
Il1β	/56-FAM/TTCCAAACC/ZEN/TTGACCTGGGCTGT/3IABkFQ/	GACCTGTTCTTTGAAGTTGACG	CTCTTGTGATGTGCTGCTG
Il6	/56-FAM/CCTACCCA/ZEN/ATTTCCAATGCTCTCCT/3IABkFQ/	TCCTTAGCCACTCCTTCTGT	AGCCAGAGTCCTCAGAGA
Mmp12	/56-FAM/AGCTGTCTT/ZEN/TGACCCACTTCGCC/3IABkFQ/	GCTCCTGCCTCACATCATA	GGCTTCTCTGCATCTGTGAA
p53	/56-FAM/ATGGCAGTC/ZEN/ATCCAGTCTTCGGAG/3IABkFQ/	TGAAAATGTCTCCTGGCTCAG	CTAGCATTAGGCCCTCATC
Pai1	/56-FAM/ACTTTGGT/ZEN/ATGCCTTTCCACCCA/3IABkFQ/	CTATGGTGAAACAGGTGGACT	CGTGTACGCTCGTCTACAG
Sting1	/56-FAM/CTGGAGCCC/ZEN/TGGTAAGATCAACCG/3IABkFQ/	AAGTCTCTGCAGTCTGTGAAG	TGTAGCTGATTGAACATTGCGA
Tgfb1	/56-FAM/ATAGATGGC/ZEN/GTTGTTGCGGTCCA/3IABkFQ/	GCGGACTACTATGCTAAAGAGG	CCGAATGTCTGACGTATTGAAGA
Tnfa	/56-FAM/CCACGTCGT/ZEN/AGCAAACCACCAAGT/3IABkFQ/	AGACCCTCACACTCAGATCA	TCTTTGAGATCCATGCCGTTG

Supplemental Table 2

Figure 1B	
<u>Body weight: Group x Sex interaction</u>	
Source of Variation	P value
Interaction	0.9849
<u>Lean mass: Group x Sex interaction</u>	
Source of Variation	P value
Interaction	0.7242
<u>Fat mass: Group x Sex interaction</u>	
Source of Variation	P value
Interaction	0.3245
Figure 6A	
<u>Body weight: Group x Sex interaction</u>	
Source of Variation	P value
Interaction	0.1493
<u>Lean mass: Group x Sex interaction</u>	
Source of Variation	P value
Interaction	0.2522
<u>Fat mass: Group x Sex interaction</u>	
Source of Variation	P value
Interaction	0.1936