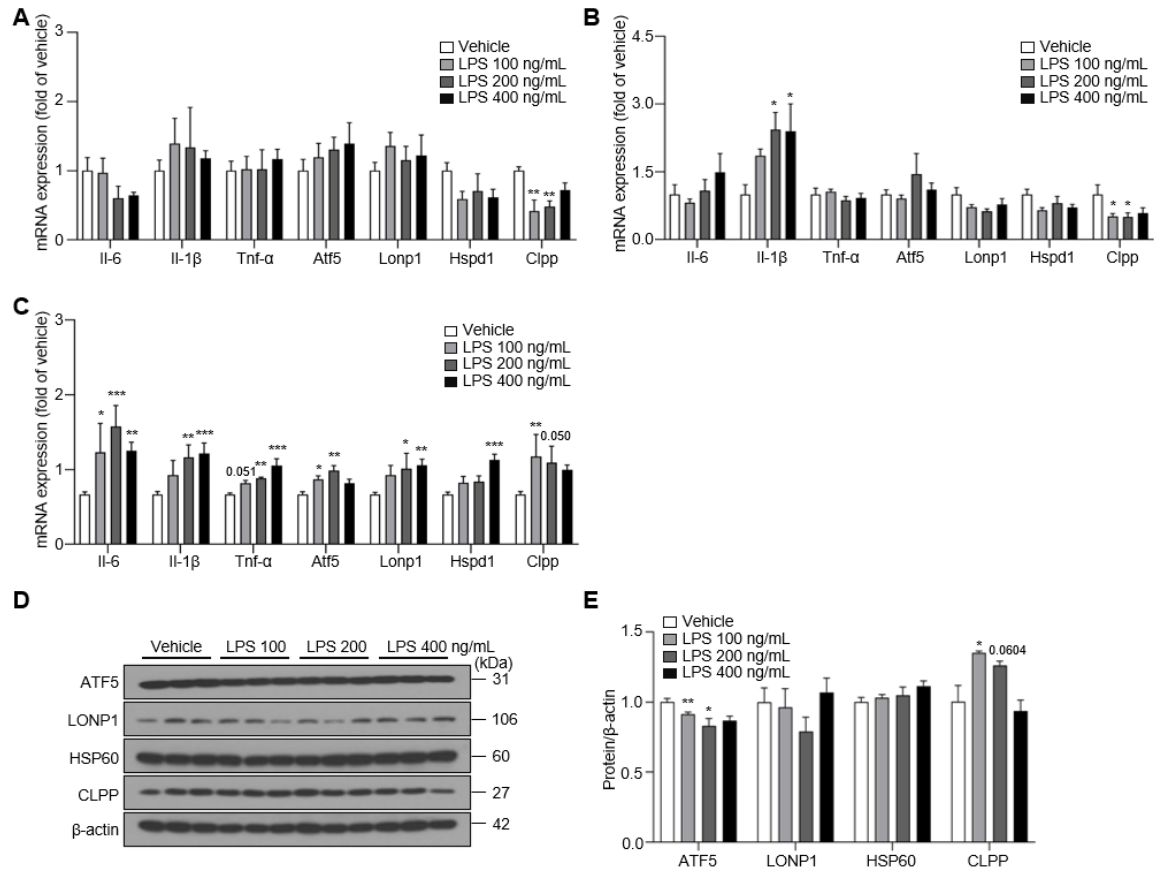
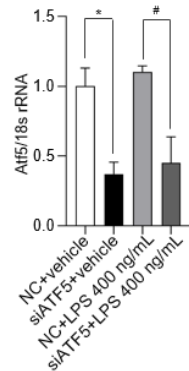


## Supplementary Figure S1



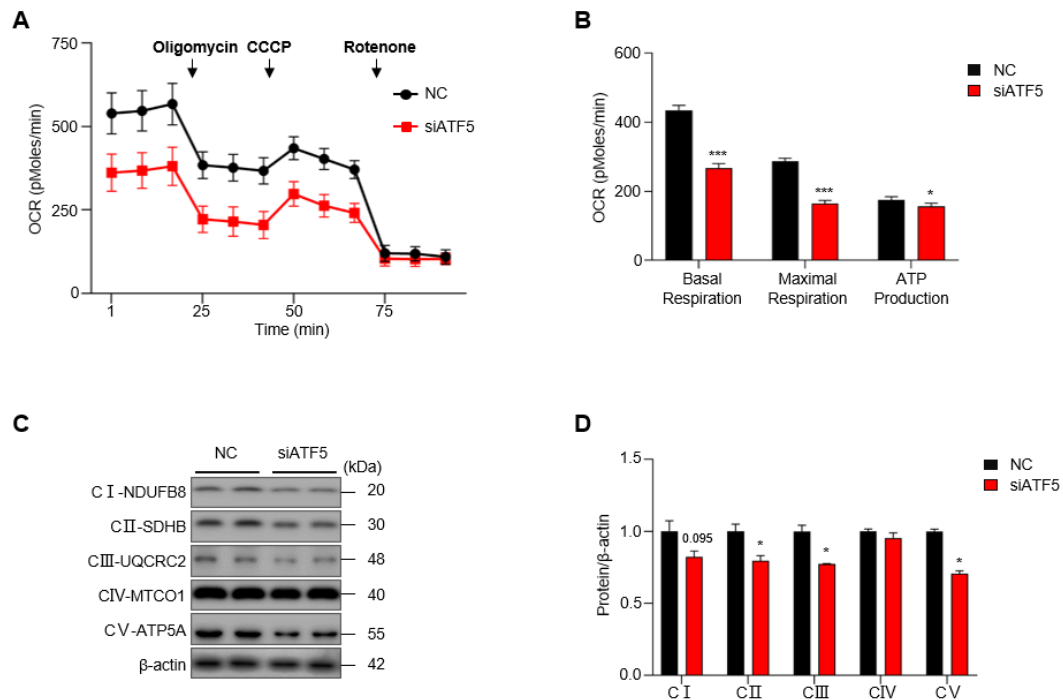
**Supplementary Figure S1.** The effect of LPS treatment on the production of *Il-6*, *Il-1 $\beta$* , *Tnf- $\alpha$* , *Atf5*, *Lonp1*, *Hspd1* and *Clpp* in BV-2 cells by time- and dose-dependent manner. (A) The expression of *Il-6*, *Il-1 $\beta$* , *Tnf- $\alpha$* , *Atf5*, *Lonp1*, *Hspd1* and *Clpp* in LPS-treated BV-2 cells at 6 h. (B) The expression of *Il-6*, *Il-1 $\beta$* , *Tnf- $\alpha$* , *Atf5*, *Lonp1*, *Hspd1* and *Clpp* in LPS-treated BV-2 cells at 12 h. (C) The expression of *Il-6*, *Il-1 $\beta$* , *Tnf- $\alpha$* , *Atf5*, *Lonp1*, *Hspd1* and *Clpp* in LPS-treated BV-2 cells for 24 h. (D) The expression of ATF5 and UPRmt molecules (LONP1, HSP60 and CLPP) in LPS-treated BV-2 cells for 24 h. (E) The intensity value of ATF5 and UPRmt molecules was shown. Data are presented as mean  $\pm$  SEM of three independent experiments (\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  compared to vehicle).

## Supplementary Figure S2



**Supplementary Figure S2.** The decrease of *Atf5* by siATF5 with or without LPS treatment. The mRNA expression of *Atf5* was measured in BV-2 cells treated with NC or siATF5 with vehicle or LPS. Data are presented as mean  $\pm$  SEM of three independent experiments (\*  $p < 0.05$  compared to NC+vehicle, #  $p < 0.05$  compared to NC+LPS 400 ng/mL).

## Supplementary Figure S3



**Figure S3.** Treatment of siATF5 decreases the mitochondrial OXPHOS in BV-2 cells for 24 h. (A) Oxygen consumption rate (OCR) was measured in BV-2 cells treated with NC or siATF5 at 24 h. (B) The basal respiration, maximal respiration and ATP production were calculated by XF24 analyzer software. (C) The expression of mitochondrial complexes I, II, III, IV and V in NC- or siATF5-treated BV-2 cells. (D) The

intensity value of mitochondrial complexes was shown. Data are presented as mean  $\pm$  SEM of three independent experiments (\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  compared to NC).

**Supplementary Table S1.** Primers used for qPCR

Gene	Forward (5'→3')	Reverse (5'→3')
<i>Atf5</i>	ACCGCAAGCAAAAGAAGAGA	CAGCCTGGACCTGTACCCTA
<i>Lonp1</i>	GACAGAGAACCCGCTAGTGC	CTCAGTGGTTCTGGGATGGT
<i>Hspd1</i>	GAGCTGGGTCCCTCACTCG	AGTCGAAGCATTCTGCGGG
<i>Clpp</i>	GCCATTCACTGCCCAATTCC	TGCTGACTCGATCACCTGTAG
<i>Il-6</i>	ACAACCACGGCCTTCCCTACTT	CACGATTTCCCAGAGAACATGTG
<i>Il-1<math>\beta</math></i>	TGACGGACCCCAAAAGATGA	AAAGACACAGGTAGCTGCCA
<i>Tnf-<math>\alpha</math></i>	ACGGCATGGATCTCAAAGAC	AGATAGCAAATCGGCTGACG
<i>18s rRNA</i>	CGACCAAAGGAACCATAACT	CTGGTTGATCCTGCCAGTAG

**Supplementary Table S2.** Antibodies used for qPCR

Name	Source	Identifier
Total OXPHOS	Abcam	ab110413
ATF5	Abcam	ab184923
LONP1	Abcam	ab103809
HSP60	Abcam	ab46798
CLPP	Abcam	ab124822
$\beta$ -actin	Santa Cruz Biotechnology	sc-47778