Figure S1. Green fluorescence in the four transfected cell lines. Scale bar, 100 µm. miR, microRNA; KD, knockdown; OE, over-expression.
Figure S2. miR-199a-5p binds to ATG5 and decreases its mRNA expression levels. (A) The sequence of the miR-199a-5p binding site within the 3'-UTR of ATG5 was predicted by TargetMiner database. (B) Reverse transcription-quantitative PCR analysis of ATG5 mRNA expression levels in various cell lines. Data are presented as the FC value relative to A549 cells. The experiments were repeated three times. """"P<0.0001; ns, not significant; ATG5, autophagy-related 5; FC, fold-change; miR, microRNA; KD, knockdown; OE, overexpression; UTR, untranslated region.
Figure S3. Effects of miR-199a-5p on ABCB1 regulation and cell proliferation. (A) The expression levels of ABCB1 protein in A549/T-miR-199a-5p-KD and A549-miR-199a-5p-OE cells with or without CQ treatment. (B) Proliferation of A549, A549/T, A549/T-miR-199a-5p-KD, A549-miR-199a-5p-OE, A549/T-pLV1-vector and A549-pGFP-vector cells. *P<0.05 and **P<0.01; ns, not significant; miR, microRNA; KD, knockdown; OE, overexpression; ABCB1, ATP-binding cassette subfamily B member 1; CQ, chloroquine; OD, optical density.
Figure S4. Cell survival curves. Cell survival was determined by the Cell Counting Kit-8 assay following treatment with ≥8 gradient concentrations of various chemotherapeutic agents for 72 h.
Table SI. Sequences used for quantitative PCR.

| Target           | Sequences (5'→3')                       |
|------------------|-----------------------------------------|
| U6 F:            | AGAGAAGATTAGCATGGCCCCCTG                |
| R:               | AGTGCAGGGTCCGAGGTATT                    |
| hsa-miR-199a-5p  | CGCGCCCAGTGTTCAGACTAC                   |
| R:               | AGTGCAGGGTCCGAGGTATT                    |
| β-actin F:       | CTACCTCATGAAGATCCTGACC                  |
| R:               | CACAGCTTCTCTTTTGATGCAC                  |
| p62/SQSTM1 F:    | TGATTGAGTCCCCCTCAGATGTC                |
| R:               | CCGCTCCGATGTCATAGTTCTTGTGG              |
| ATG5 F:          | GATGGGATTGCAAAAATGACAGA                 |
| R:               | GAAAGTCTTTTCAGTCCGTGTGTC                |
| ATG7 F:          | TGTATAACACCAACACACTCGA                  |
| R:               | GCCAGGATAGCAAAAACCAATAG                 |

miR, microRNA; SQSTM1, Sequestosome-1; ATG, autophagy-related.