

Supplementary information Figure S1 High-throughput screening in 3T3-L1 and validation of the browning effect of ATM in C3H10T1/2 and SVF.

- (A) The flow chart of high-throughput screenings.
- (B) The morphological change caused by ATM in 3T3-L1(day 8).
- (C) Transcriptional level of browning related genes in 3T3-L1 (day 8) treated with or without ATM, detected by one-step qPCR, \*p<0.05, \*\*p<0.01; student's t test, n=3.
- (D) The schema of treating BMP4-committed C3H10T1/2 in the different phase by ATM.
- (E) The morphological alteration induced by ATM when treating BMP4-committed C3H10T1/2 in different phase.
- (F) Western blotting of UCP1 when treating BMP4-committed C3H10T1/2 in different phase with ATM.
- (G) The morphological alteration induced by ATM (15 μM) when treating SVF for 8 days.
- (H) Western blotting of UCP1 when treating SVF with different doses of ATM for 8 days.