Figure S1

A549 and NCI-H1299 cells were also transfected with CCAT1 overexpression vector (CCAT1), as expected, CCAT1 expression was significantly up-regulated in A549 and NCI-H1299 cells (Fig. S1A). Next, functional experiments exhibited that CCAT1 overexpression showed the exact opposite effects by promoting cell proliferation, migration, invasion and inhibiting apoptosis in NSCLC (Fig. S1C-F). In addition, miR-216a-5p or NC was further transfected into CCAT1 overexpressed A549 and NCI-H1299 cells, we found miR-216a-5p mimic rescued the reduction of miR-216a-5p level induced by CCAT1 up-regulation (Fig. S1B). Moreover, rescue assay showed the promotive effects of CCAT1 on cell malignant phenotypes were markedly abrogated by miR-216a-5p up-regulation in NCI-H1299 and A549 cells (Fig. S1C-F).

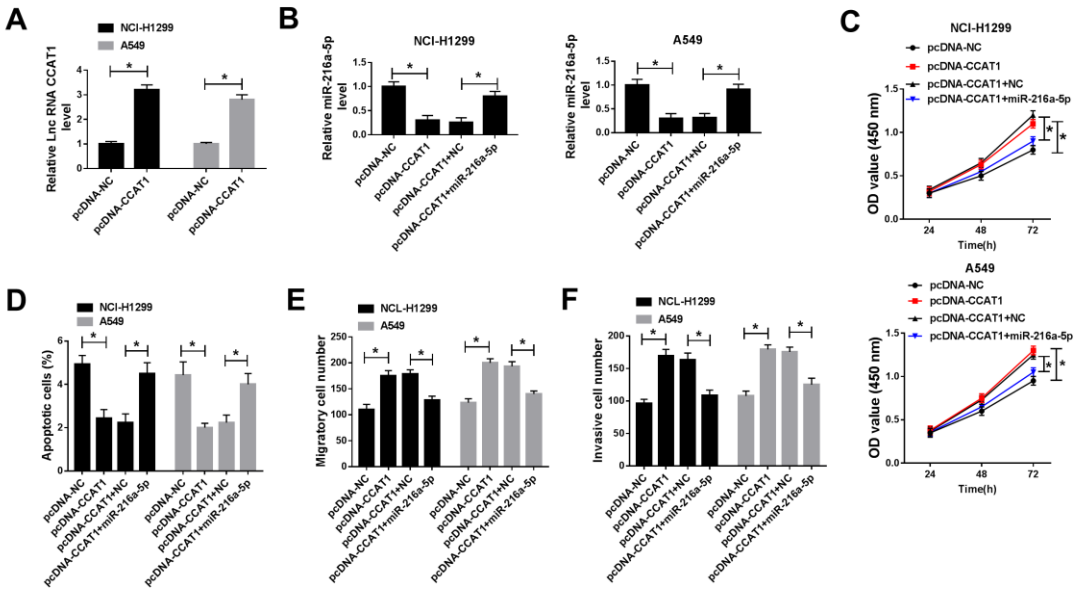

Fig. S1 CCAT1 promotes cell malignant phenotypes in NSCLC via miR-216a-5p. (A) CCAT1 expression was measured using qRT-PCR in A549 and NCI-H1299 cells transfected with pcDNA-NC or pcDNA-CCAT1. The miR-216a-5p or NC was further transfected into CCAT1 overexpressed A549 and NCI-H1299 cells, after transfection, (C-F) cell proliferation (C), apoptosis (D), migration (E) and invasion (F) were detected by CCK-8, flow cytometry and transwell assays, respectively. **P*<0.05.

Figure S2

The exact copy number of CCAT1, miR-216a-5p and RAP2B expression in each cell was detected, qRT-PCR analysis showed that CCAT1 was expressed in 53/45 copies, miR-216a-5p was 26/18 copies, and RAP2B was expressed in 85/74 copies in per NCI-H1299 or A549 cell (Fig. S2 A, B).

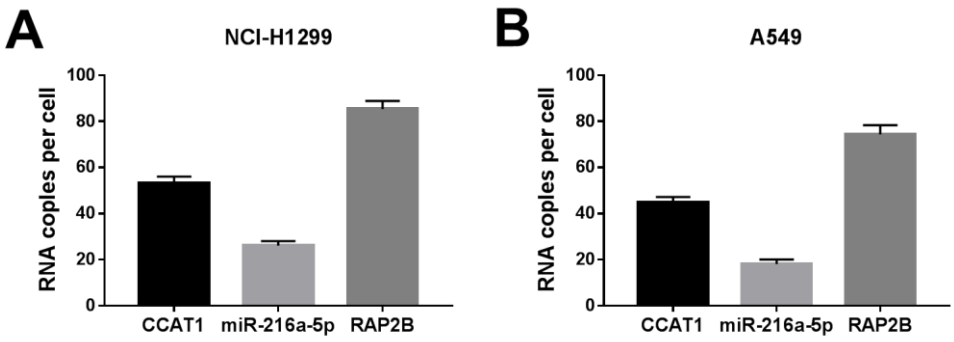

Fig. S2 The copy number of CCAT1, miR-216a-5p or RAP2B in NSCLC cells. (A, B) qRT-PCR analysis of the exact copy number of CCAT1, miR-216a-5p or RAP2B in each A549 and NCI-H1299 cell.