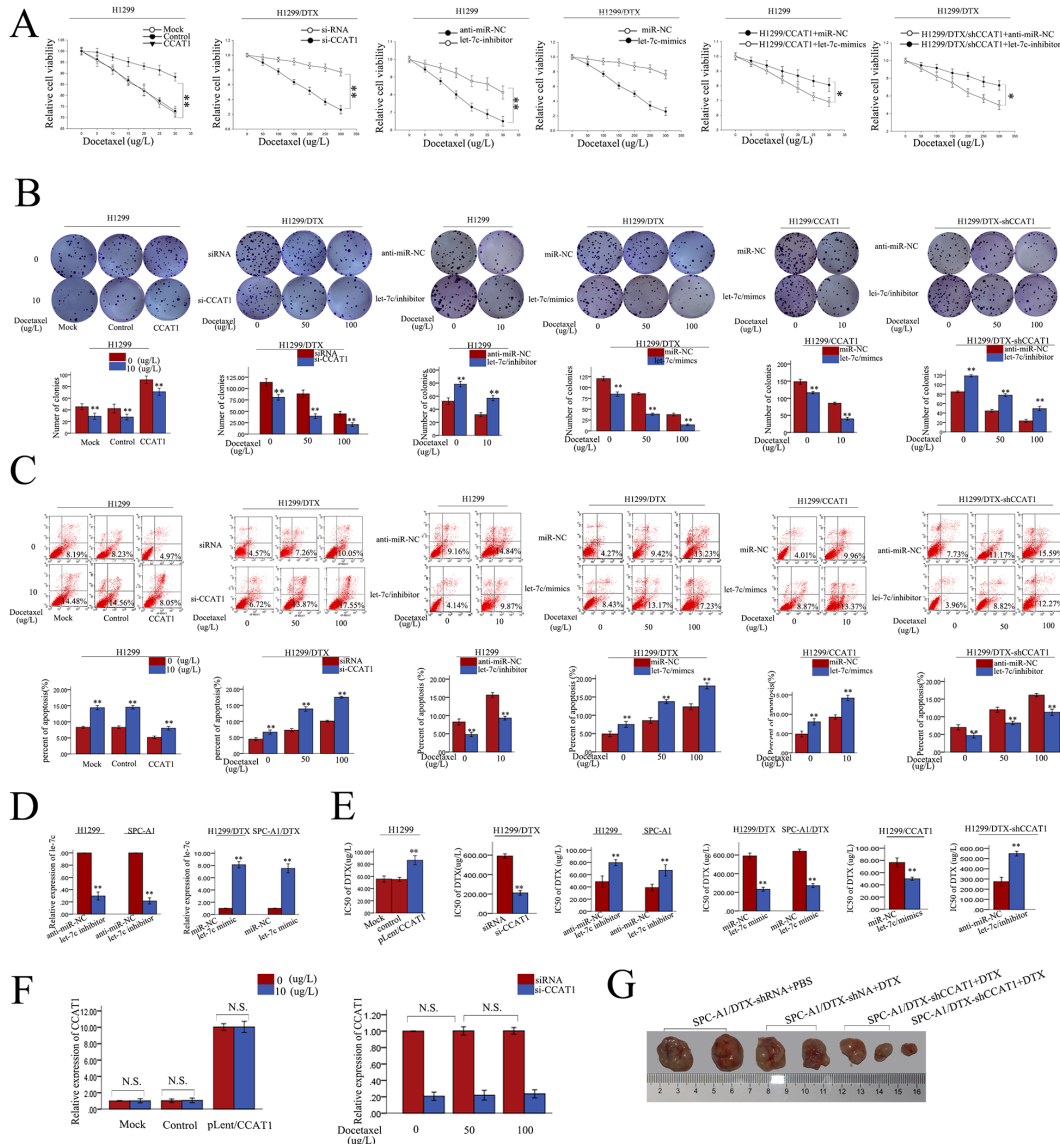


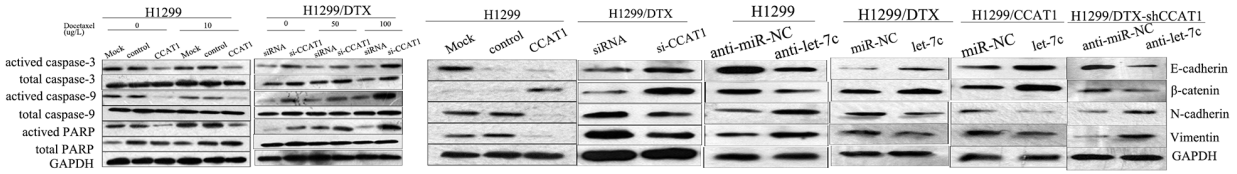
Long noncoding RNA CCAT1 acts as an oncogene and promotes chemoresistance in docetaxel-resistant lung adenocarcinoma cells

SUPPLEMENTARY FIGURES AND TABLE

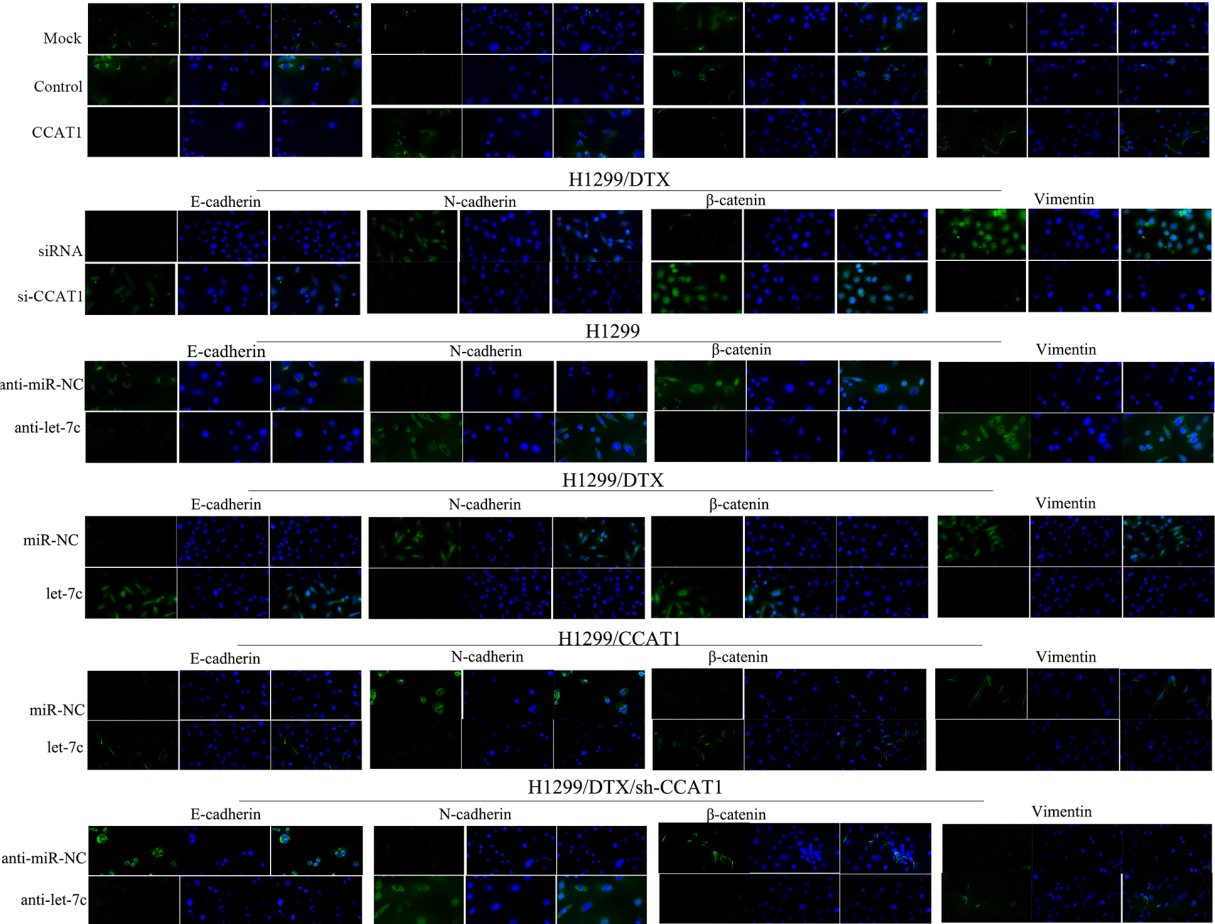


Supplementary Figure S1: A.MTT assays to measure cell viability, B. colony formation assays to measure cell proliferation, and C. flow cytometry analysis to measure apoptosis in (left to right) H1299 cells transfected with CCAT1, H1299/DTX cells transfected with si-CCAT1, H1299 cells transfected with let-7c inhibitor, H1299/DTX cells transfected with let-7c mimics, H1299/CCAT1 cells co-transfected with let-7c mimics, and H1299/DTX/shCCAT1 cells co-transfected with let-7c inhibitor. D. qRT-PCR was performed to measure transfection efficiency. SPC-A1 and H1299 cells were transfected with let-7c inhibitor while SPC-A1/DTX and H1299/DTX cells were transfected with let-7c mimics. E. MTT was performed to examine the IC50 of cells. Left to right: H1299 cells transfected with CCAT1, H1299/DTX cells transfected with si-CCAT1, H1299 and SPC-A1 cells transfected with let-7c inhibitor, H1299/DTX and SPC-A1/DTX cells transfected with let-7c mimics, H1299/CCAT1 cells co-transfected with let-7c mimics, and H1299/DTX/shCCAT1 cells co-transfected with let-7c inhibitor. F. qRT-PCR was applied to compare the difference between the different concentration of docetaxel on the overexpression and the downregulation of CCAT1. G. Five mice were used in every group (N=5), and one mouse in the last group was dead.

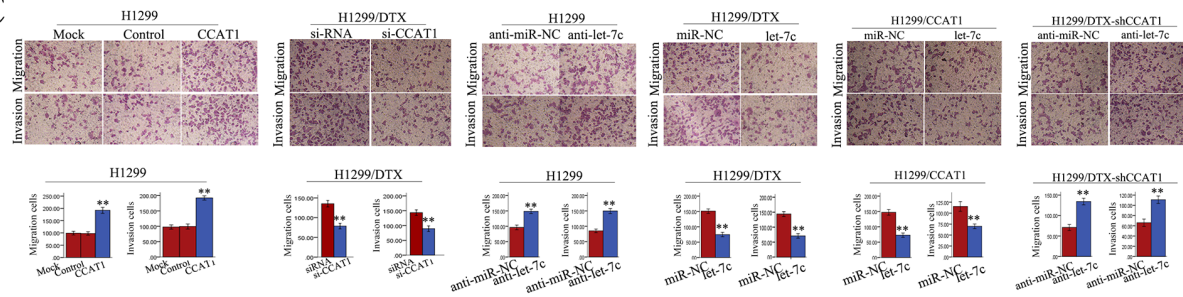
A



B



C



Supplementary Figure S2: A. Western blot and **B.** Immunofluorescence to detect EMT markers, and **C.** transwell assays to determine cell migration and invasion ability of (left to right) H1299 cells transfected with CCAT1, H1299/DTX cells transfected with si-CCAT1, H1299 cells transfected with let-7c inhibitor, H1299/DTX cells transfected with let-7c mimics, H1299/CCAT1 cells co-transfected with let-7c mimics, and H1299/DTX/shCCAT1 cells co-transfected with let-7c inhibitor.

Supplementary Table S1: Initial profiling of miRNAs in CCAT1 downregulated LAD cells (SPC-A1/DTX-shCCAT1) compared with the control cells (SPC-A1/DTX)

	miRNA	fold-change
1	has-miRNA-130a-3p	2.5172
2	has-miRNA-130b-3p	1.6315
3	has-miRNA-148a-3p	3.8173
4	has-miRNA-148b-3p	1.9506
5	has-miRNA-152-3p	0.2141
6	has-miRNA-181a-5p	0.4231
7	has-miRNA-181b-5p	0.6564
8	has-miRNA-181c-5p	0.4098
9	has-miRNA-181d-5p	0.4326
10	has-miRNA-216a-5p	0.1223
11	has-miRNA-218-5p	4.7044
12	has-miRNA-24-3p	0.3652
13	has-miRNA-296-3p	0.3697
14	has-miRNA-301a-3p	0.641
15	has-miRNA-301b	0.3306
16	has-miRNA-3666	0.6046
17	has-miRNA-410-3p	4.3524
18	has-miRNA-4295	0.6381
19	has-miRNA-454-3p	2.5771
20	has-miRNA-4262	1.1676
21	has-miRNA-490-3p	0.3242
22	has-miRNA-543	1.3411
23	has-miRNA-let-7a	1.356
24	has-miRNA-let-7b	2.134
25	has-miRNA-let-7c	6.0174
26	has-miRNA-let-7e	1.0126