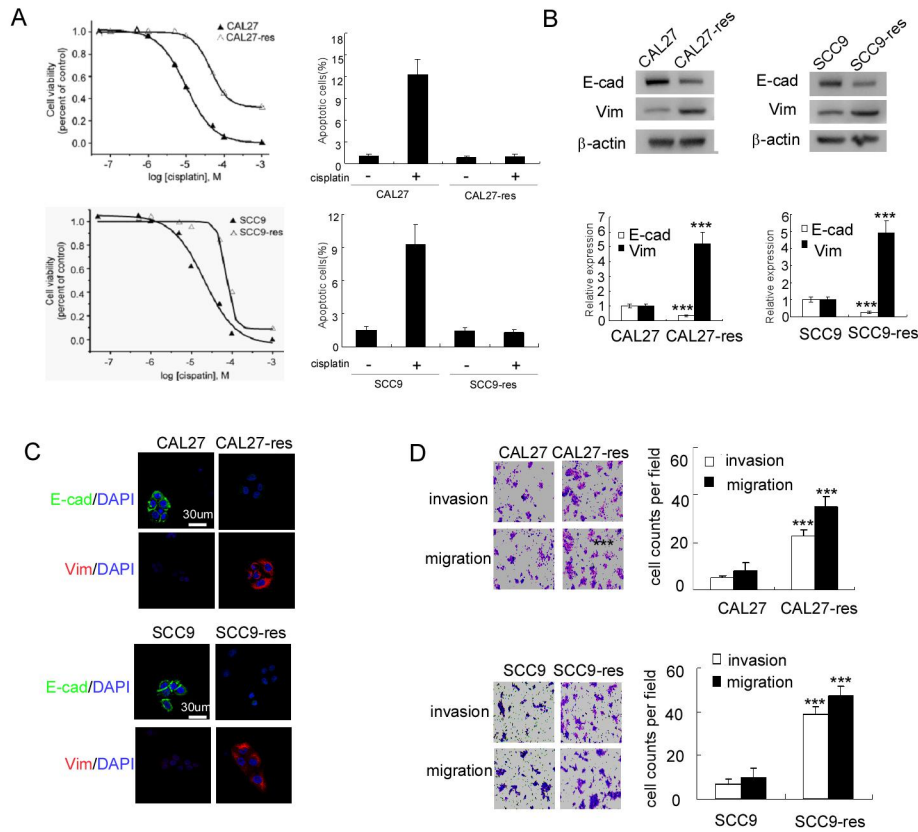


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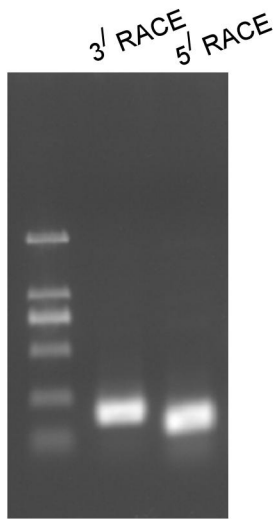
Supplemental Information

Chemotherapy-Induced Long Non-coding RNA 1 Promotes Metastasis and Chemo-Resistance of TSCC via the Wnt/ β -Catenin Signaling Pathway

Zhaoyu Lin, Lijuan Sun, Shule Xie, Shanyi Zhang, Song Fan, Qunxing Li, Weixiong Chen, Guokai Pan, Weiwei Wang, Bin Weng, Zhang Zhang, Bodu Liu, and Jinsong Li



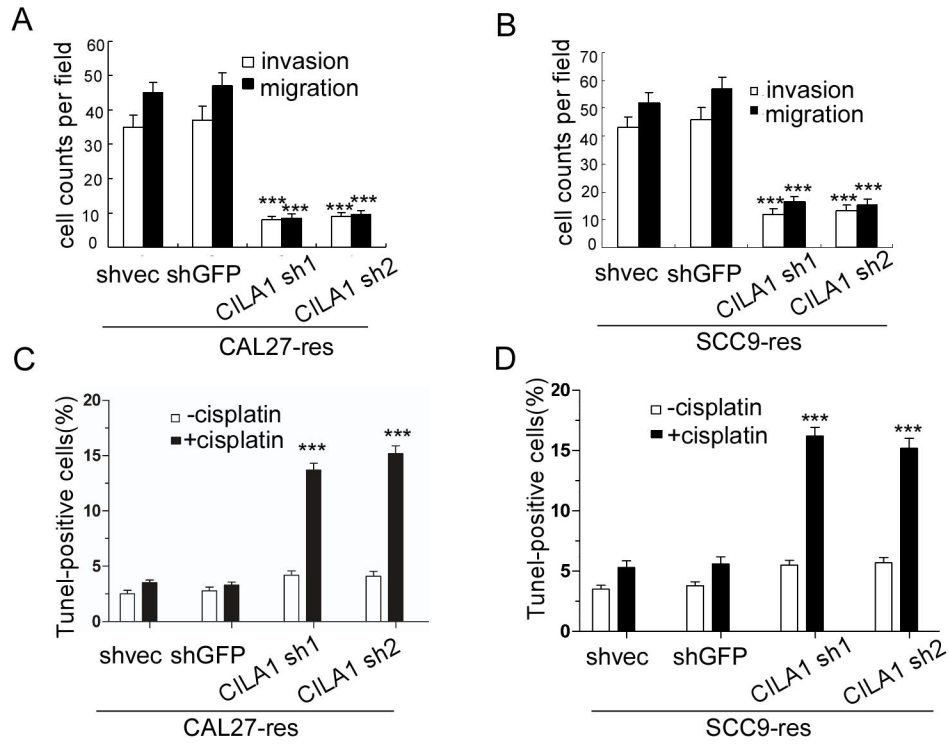
Supplementary Fig. 1. Cisplatin-resistant TSCC cells have undergone EMT. (A) MTS assay and flow cytometry were performed to assay cell viability and cell apoptosis. (B) Western blotting, qRT-PCR and (C) immunofluorescence staining illustrated reduced expression of *E-cadherin* (*E-cad*) and increased expression of *vimentin* (*Vim*) in chemoresistant TSCC cells. Nuclei: blue, scale bar: 30 μm. (D) Modified Boyden chamber assays demonstrated enhanced invasion and migration of CAL27-res and SCC9-res cells (100×).



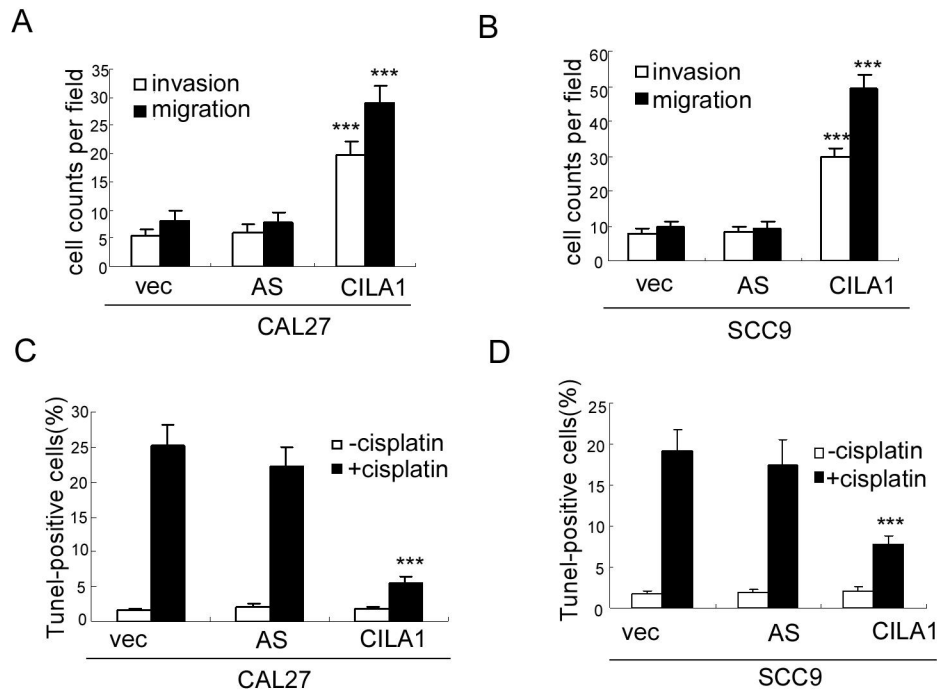
Cloned CILA1 full sequence: 709bp

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 TGATTTCTGCATTTCCATCTGAGGCTACACCCTGCAAG-
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 GACTTTCCCATCCTATGAGCCCAGGTGGGAGAAGCTGA-
 AAATGGCAGAAGGTCACTTTTCCAGCTGCCCTGTGCCT-
 GCACTTCAGGGCCAAGGAGTTTGAAGAAGTCCAAGGTA-
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 GGCTGTTGTTACCCCAACCCACTTAAAATTCCTTGAG-
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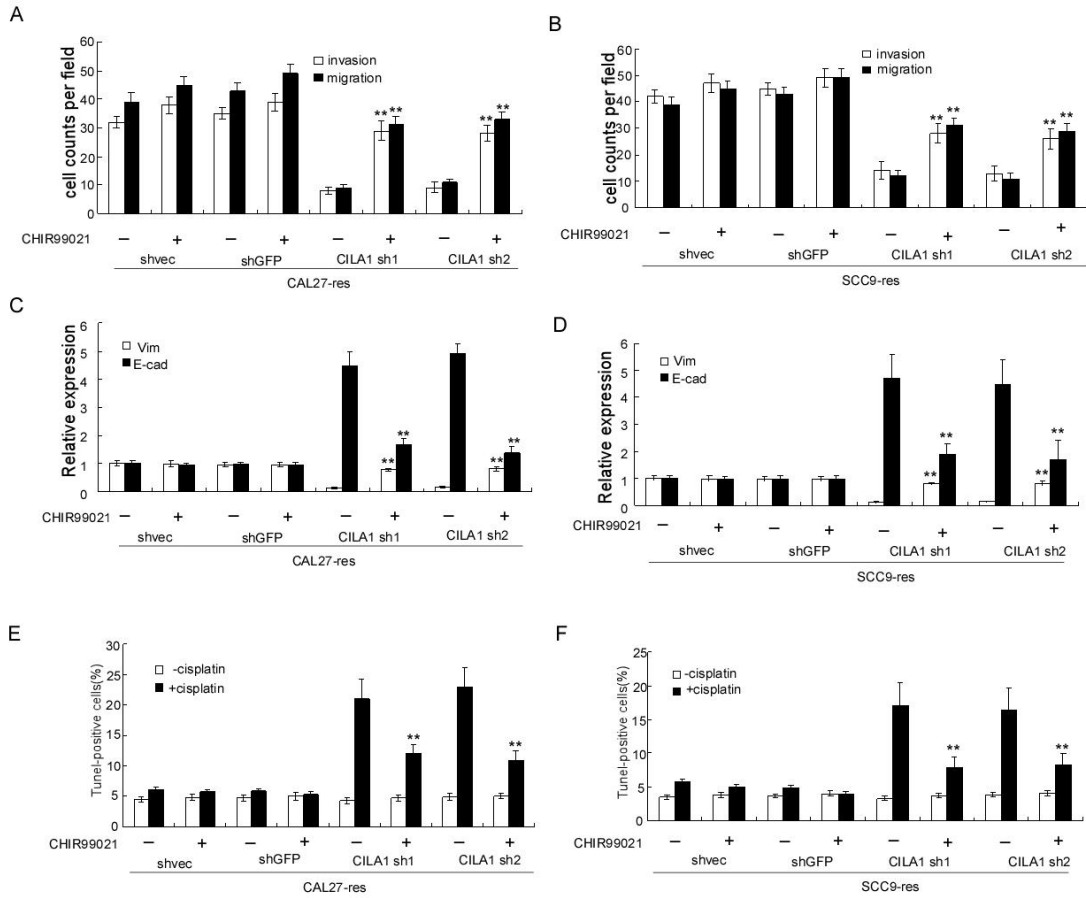
Supplementary Fig. 2. Full-length CILA1 was cloned and amplified by RACE.



Supplementary Fig. 3. (A) and (B) Boyden chamber assays were performed to examine changes in TSCC cell motility following CILA1 downregulation. (C) and (D) TUNEL assays was performed to determine the anti-apoptotic effect following CILA1 downregulation. (***) $P < 0.001$



Supplementary Fig. 4. (A) and (B) Boyden chamber assays were performed to examine the changes in TSCC cell motility after upregulating CILA1 expression. (C) and (D) TUNEL assays were performed to determine the anti-apoptotic effect of CILA1 following CILA1 upregulation (***) $P < 0.001$).



Supplementary Fig. 5. (A) and (B) Boyden chamber assays were performed to examine the effect of CHIR99021 on chemoresistant TSCC cell motility. (C) and (D) qRT-PCR was performed to examine the effect of CHIR99021 on chemoresistant TSCC cell EMT-related gene expression. (E) and (F) TUNEL assays were performed to determine the effect of CHIR99021 on chemoresistant TSCC cell apoptosis (** $P < 0.01$).

Supplementary table 1 Fold Change(SCC9-res/SCC9) and Regulation

SEQ_ID	p-value	FC	Absolute logFC*(-log(p-value))
ASLNC08201	0.0000151	40.070263	7.727242741
ASLNC02104	0.0000318	20.515862	5.901219362
ASLNC05042	0.000236	36.86618	5.68229812
DA720951	0.000191	28.08335	5.386733175
ASLNC18836	0.000123	21.506205	5.21045083
ASLNC07991	0.000182	20.374893	4.895923106
ASLNC16165	0.000203	20.504148	4.843980778
BE144234	0.0000182	9.462565	4.626212396
ASLNC21850	0.000257	15.9932	4.322208487
exon2743	0.001086614	23.32594	4.05417226
ASLNC06390	0.000317	12.993266	3.896834433
ASLNC23343	0.0000827	7.949204	3.67556631
CILA1	0.000729	14.196747	3.614730339
ASLNC19458	0.000068	5.5132375	3.08980582
AK124439	0.001686586	11.955446	2.988080764
ASLNC21657	0.001517045	11.404633	2.979913849
ASLNC05805	0.001378485	9.283883	2.768285483
ASLNC16838	0.000126	5.0987124	2.758833865
ASLNC12735	0.000416	6.504114	2.749313222
ASLNC16219	0.000167	5.228774	2.7136
ASLNC07749	0.000533	6.318715	2.62067636
ASLNC06008	0.001089988	7.3489647	2.566262814
exon655	0.000406	5.587273	2.534108981
AV747682	0.000337	5.026671	2.435105305
BX093190	0.002106526	7.8673916	2.397631187
ASLNC05502	0.0013531	6.6181087	2.354414792
ASLNC15926	0.000931	5.9120216	2.339170686
ASLNC01712	0.002056881	7.262441	2.313548883
ASLNC21104	0.003139346	8.216363	2.28959018
ASLNC18399	0.00182934	6.8335896	2.285022923
exon2903	0.003491177	8.311547	2.259684215
ASLNC01284	0.002171475	7.0177984	2.253640425
AK129581	0.006394999	10.48987	2.239732445
ASLNC04384	0.001681384	6.162041	2.190959044

AI744597	0.012906011	14.403054	2.188561641
ASLNC16096	0.002514039	6.338377	2.08484463
ASLNC23349	0.005283073	8.189105	2.079542923
BF873246	0.002337037	5.989154	2.045508539
ASLNC16161	0.015383688	12.371554	1.980499123
ASLNC19113	0.003221265	5.673729	1.878620579
ASLNC21416	0.003682749	5.836801	1.8647378
ASLNC01049	0.005621055	6.5286674	1.833503657
BG218484	0.007063437	6.802415	1.791044993
ASLNC09657	0.004059661	5.5203705	1.774424604
ASLNC22042	0.004811209	5.4663224	1.709790033
ASLNC24861	0.00502692	5.3837442	1.680542306
AI935368	0.042484835	16.761286	1.679463256
ASLNC15095	0.020478671	9.830807	1.676183576
ASLNC21501	0.00573784	5.3347864	1.629652194
ASLNC19961	0.009945265	6.405494	1.615027789
ASLNC19152	0.005202038	5.025704	1.601412062
ASLNC02044	0.00931661	5.991583	1.578986408
ASLNC10793	0.009341336	5.965947	1.574311916
ASLNC02958	0.006064923	5.0701323	1.563150943
ASLNC02761	0.010878156	6.21361	1.557687068
AA935188	0.013426022	6.504708	1.522405265
ASLNC01418	0.012773945	6.3594394	1.521414125
ASLNC07466	0.0256155	6.98567	1.343554741
ASLNC04559	0.022237668	5.8499594	1.268035202
exon653	0.038682684	7.7552176	1.256536741
ASLNC01177	0.022332508	5.669594	1.244161385
ASLNC09871	0.028852765	6.425439	1.244018888
ASLNC03863	0.019566856	5.1736703	1.219510138
exon654	0.032520954	6.53382	1.212835645
ASLNC06505	0.027760431	5.106413	1.102234712
ASLNC16599	0.002555202	17.212223	3.203999722

Supplementary table 2 Primers for genes involved in qRT-PCR.

Gene name		primer
bc016962	Forward	AATCTTTGCAGGTGGGCATG
	Reverse	TTGACCTGCTCATCCCAAAC
ak094950	Forward	attgcatgctcccacgaac
	Reverse	aaccctaactccagatgtgtcg
ak001058	Forward	tgggggtaagcacaatcc
	Reverse	aatggcaaagcagcacagag
be144234	Forward	accaagcgagaaggaactcag
	Reverse	tcagtggcatgttgaaagc
al359062	Forward	actcggcacaatcaaaggc
	Reverse	aggctcgaaatgggtctttg
bc042436	Forward	atgccgcaaaggttggtg
	Reverse	atgtgccttccccctttcag
CILA1	Forward	tgggtgatttctgcgtttcc
	Reverse	agcttcctctctgtaaagtgc
E-cadherin	Forward	GCCGCTGGCGTCTGTAGGAA
	Reverse	TGACCACCGCTCTCCTCCGA
β -catenin	Forward	CCAGCCGACACCAAGAAGCA
	Reverse	GCGGGACAAAGGGCAAGATT
vimentin	Forward	TGGATTCACTCCCTCTGGTTG
	Reverse	CGTGATGCTGAGAAGTTTCGTT
GAPDH	Forward	ACCCAGAAGACTGTGGATGG
	Reverse	GAGGCAGGGATGATGTTCTG

Supplementary table 3 Primary antibodies used in the study.

Antibody	MV (KDa)	Sources (Catalogue #)	Dilution
E-cadherin	135	Cell Signaling Technology (#3195) (Beverly, MA)	WB:1:2000, IF:1:200
Vimentin	57	Cell Signaling Technology (#5741) (Beverly, MA)	WB:1:2000, IF:1:100
GSK3 β	46	Cell Signaling Technology (#9315) (Beverly, MA)	WB:1:1000
p-GSK3 β (Ser9)	46	Cell Signaling Technology (#9336) (Beverly, MA)	WB:1:1000
β -catenin	92	Cell Signaling Technology (#8480) (Beverly, MA)	WB:1:2000,IF:1:100
p- β -catenin(Ser33/37/Thr41)	92	Cell Signaling Technology (#9561) (Beverly, MA)	WB:1:1000
c-Myc	57	Cell Signaling Technology (#9402) (Beverly, MA)	WB:1:1000
survivin	16	Santa cruz(#sc-D8) (California)	WB:1:200
Lamin B1	68	Cell Signaling Technology (#13435) (Beverly, MA)	WB:1:1000
PCNA	36	Cell Signaling Technology (#2586) (Beverly, MA)	IHC: 1:4000
GAPDH	36	Proteintech,(#10494) (Chicago, IL)	WB:1:5000
β -actin	45	Cell Signaling Technology (#3700) (Beverly, MA)	WB:1:1000