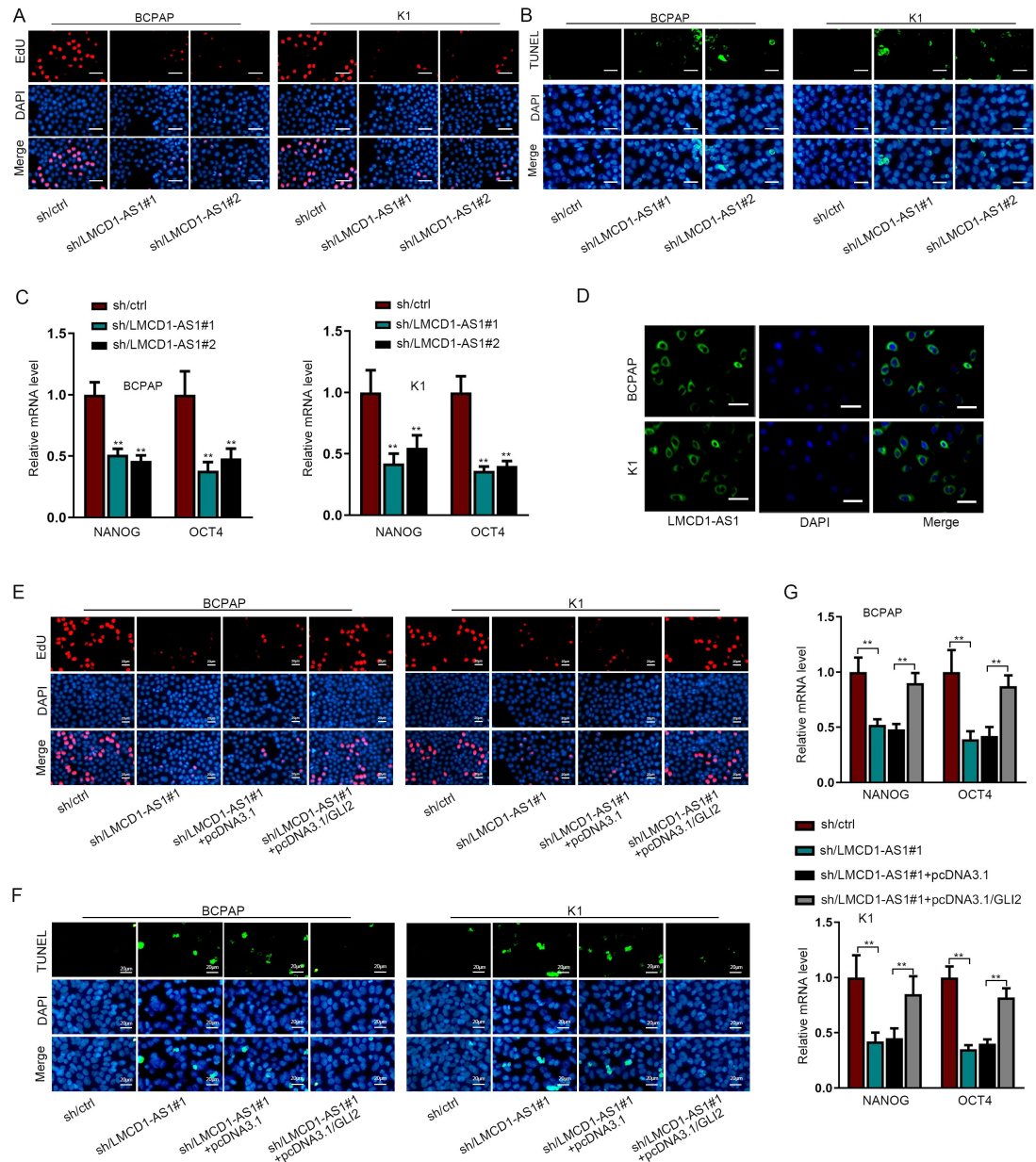


### Primer sequences used in qRT-PCR

LMCD1-AS1 (forward)	5'-CTGACTACCCAGCTCCCTTC-3'
LMCD1-AS1 (reverse)	5'-AGGACCTCAGAGCTGGAGTG-3'
GLI2 (forward)	5'-GCCAGCCAAGGTGGGAT-3'
GLI2 (reverse)	5'-GGCAGACGTCTCCATCTCAG-3'
OCT4 (forward)	5'-TGACGTGTATTGCTTGGGCT-3'
OCT4 (reverse)	5'-TGACGTGTATTGCTTGGGCT-3'
NANOG (forward)	5'-CTCGTATTTGCTGCATCGTAATG-3'
NANOG (reverse)	5'-TCTCCACCCCAACCAAAAAT-3'
GAPDH (forward)	5'-GGAGCGAGATCCCTCCAAAAT-3'
GAPDH (reverse)	5'-GGCTGTTGTCATACTTCTCATGG-3'
miR-1287-5p (forward)	5'-TCGAGTGCGGGATCAGTGGTT-3'
let-7i-5p (forward)	5'-CCGAGTGAGGTAGTAGTTTGT-3'
let-7e-5p (forward)	5'-TCGAGTGAGGTAGGAGGTTGT-3'
miR-345-5p (forward)	5'-TAGAGGCTGACTCCTAGTCCA-3'
miR-196b-5p (forward)	5'-CCGAGTAGGTAGTTTCCTGTT-3'
miR-4500 (forward)	5'-CCGCGTGAGGTAGTAG-3'
let-7b-5p (forward)	5'-CCGAGTGAGGTAGTAGGTTGT-3'
let-7c-5p (forward)	5'-CCGAGTGAGGTAGTAGGTTGT-3'
miR-98-5p (forward)	5'-CCGAGTGAGGTAGTAAGTTGT-3'
let-7g-5p (forward)	5'-CCGAGTGAGGTAGTAGTTTGT-3'
miR-106a-5p (forward)	5'-CCGAGAAAAGTGCTTACAGTGC-3'
Universal reverse primers for miRNAs	5'-CTCAACTGGTGTTCGTGGA-3'
U6 (forward)	5'-CTCGCTTCGGCAGCACA-3'
U6 (reverse)	5'-AACGCTTCACGAATTTGCGT-3'





**Figure S1** (A) Experimental data for EdU assay in two THCA cells with LMCD1-AS1 silencing (Scale bar: 100 μm; Proliferated cells were stained by EdU (red fluorescence); Nuclei were stained by DAPI (blue fluorescence); Percent of proliferative cells = EdU positive cells/DAPI-stained cells). (B) Experimental data for TUNEL assay two THCA cells with LMCD1-AS1 silencing (Scale bar: 100 μm; Apoptotic cells were stained by TUNEL; Nuclei were stained by DAPI; Apoptosis rate = TUNEL positive cells/DAPI-stained cells). (C) The mRNA levels of stemness markers were measured in THCA cells with LMCD1-AS1 silencing by qRT-PCR. (D) The cellular distribution of LMCD1-AS1 was verified by FISH assay (Scale bar: 100 μm; red fluorescence: LMCD1-AS1; blue fluorescence: nuclei). (E) Proliferative ability of LMCD1-AS1-silenced cells was

detected by EdU assay after overexpression of GLI2. (F) Apoptosis of LMCD1-AS1-silenced cells was detected by TUNEL assay after overexpression of GLI2. (G) mRNA levels of stemness markers were assessed by qRT-PCR in LMCD1-AS1-silenced cells after overexpression of GLI2. \*\*P<0.01. GLI2, GLI family zinc finger 2; THCA, thyroid cancer; LMCD1-AS1, LMCD1 antisense RNA 1; EdU, 5-Ethynyl-20-deoxyuridine; TUNEL, Terminal-deoxynucleotidyl Transferase Mediated Nick End Labeling.