

Table S1. List of *TTTY15* targeted genes detected in 4C.

Gene	Chromosome	Gene description	Gene type	Cutting site check ( <i>CvuQ</i> I/ <i>Sac</i> I)
KCNT2	Chromosome 1	Potassium channel, subfamily T, member 2	Protein-coding	False
WDR26	Chromosome 1	WD repeat domain 26	Protein-coding	False
CCDC3	Chromosome 10	Coiled-Coil Domain Containing 3	Protein-coding	True
LINC00674	Chromosome 17	Long intergenic non-protein coding RNA 674	Noncoding RNA	True

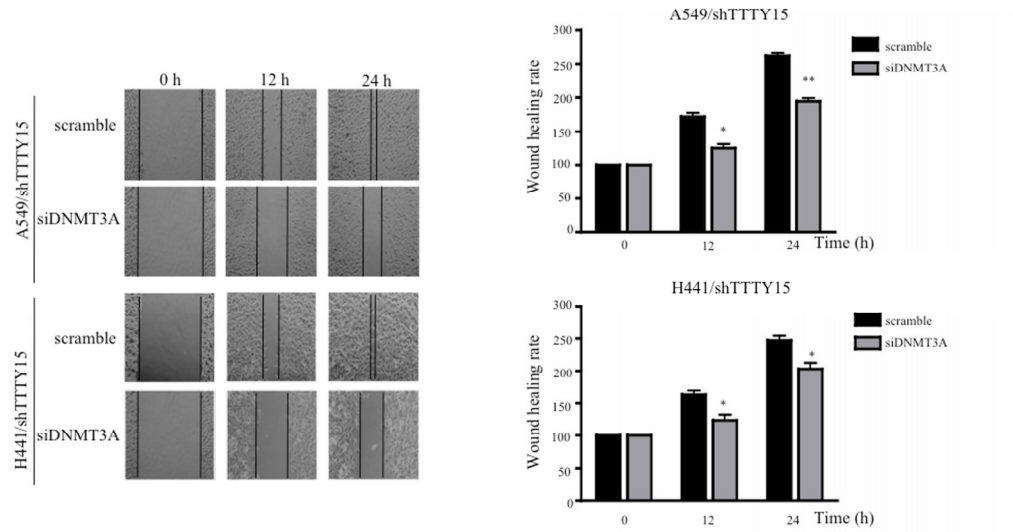
Table S2. Clinicopathological features and correlation of *TBX4* and *DNMT3A* expressions in NSCLC patients (n = 37)

Parameter	N = 37	Relative <i>TBX4</i> expression		<i>p</i> value	Relative <i>DNMT3A</i> expression		<i>p</i> value
		Low (N = 28)	High (N = 9)		Low (N = 12)	High (N = 25)	
Age (years)				0.714			0.1704
≤65	18	13	5		8	10	
>65	19	15	4		4	15	
Tumor size (maximum diameter)				0.7046			0.4701
≤3 cm	14	10	4		6	8	
>3 cm	23	18	5		6	17	
Lymph node metastasis							
N0	12	6	6	0.0355	7	5	0.0292
N1	25	22	3		5	20	
TNM (Tumor-Node-Metastasis) stage							
I-II	13	6	7	0.0041	8	5	0.0097
III-IV	24	22	2		4	20	

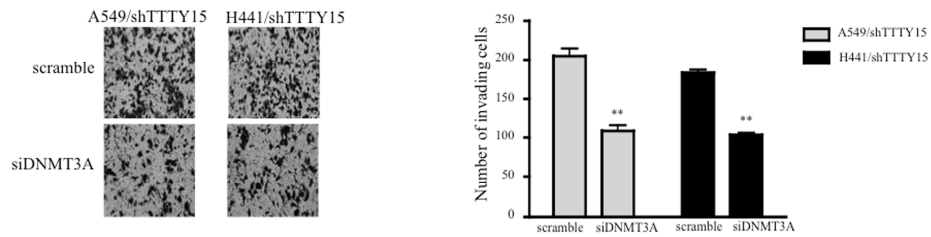
Table S3. Methylation-specific PCR primers for analysis of TBX4 promoter.

CpG islands	Primers	Sequence (5'-3')	Size (bp)
CpG 2	CpG 2-Me-F	GAGAGTATTGAGTAGGTTTC	93
	CpG 2-Un-F	GAGAGTATTGAGTAGGTT TT	93
	CpG 2-R	CAACCCTACCCTATAAAAAAC	
CpG 9	CpG 9-Me-F	TTATAGGGTAGGGTTGAGC	95
	CpG 9-Un-F	TTATAGGGTAGGGTTGAGT	95
	CpG 9-R	CCTCTACTAAACTCTTATCAC	
CpG 10	CpG 10-Me-F	TATAGGGTAGGGTTGAGYGC	95
	CpG 10-Un-F	TATAGGGTAGGGTTGAGYGT	95
	CpG 10-R	CCTCTACTAAACTCTTATCAC	
CpG 16	CpG 16-Me-F	GTYGTAGGGTTTYGTTGTAC	96
	CpG 16-Un-F	GTYGTAGGGTTTYGTTGTAT	96
	CpG 16-R	CACAAAAAAAACCATCTCAC	

A.



B.



**Figure S1.** The DNMT3A knockdown rescued the cell migration and invasion abilities in A549/shTTTY15 and H441/shTTTY15 cells. (A) Wound scratch assays were performed to analyze the migration efficiency of DNMT3A knockdown A549/shTTTY15 and H441/shTTTY15 cells compared to the scramble cells. Magnification,  $\times 200$ . (B) Transwell invasion assays were performed to determine the invasion ability of DNMT3A knockdown A549/shTTTY15 and H441/shTTTY15 cells compared to the scramble cells. Data are presented as the mean  $\pm$  SD; \* $p < 0.05$ , \*\* $p < 0.01$ . Statistical analysis was conducted by Student's  $t$ -test ( $n = 3$ ).