

Supplementary Information

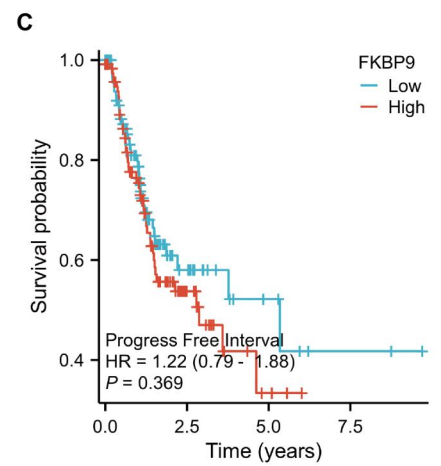
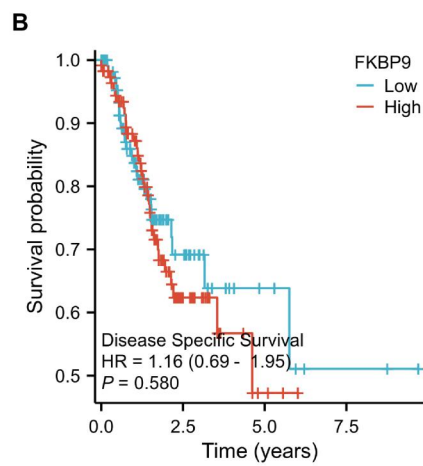
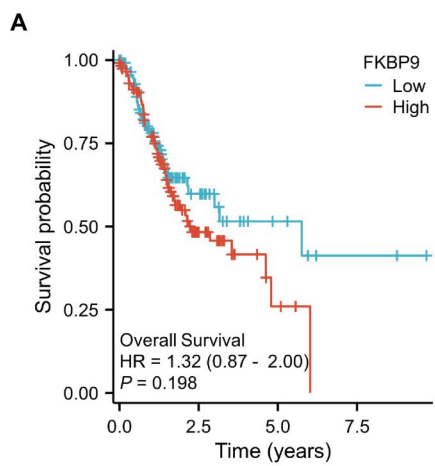
Fig. S1. COX regression analysis of FKBP9 in GC.

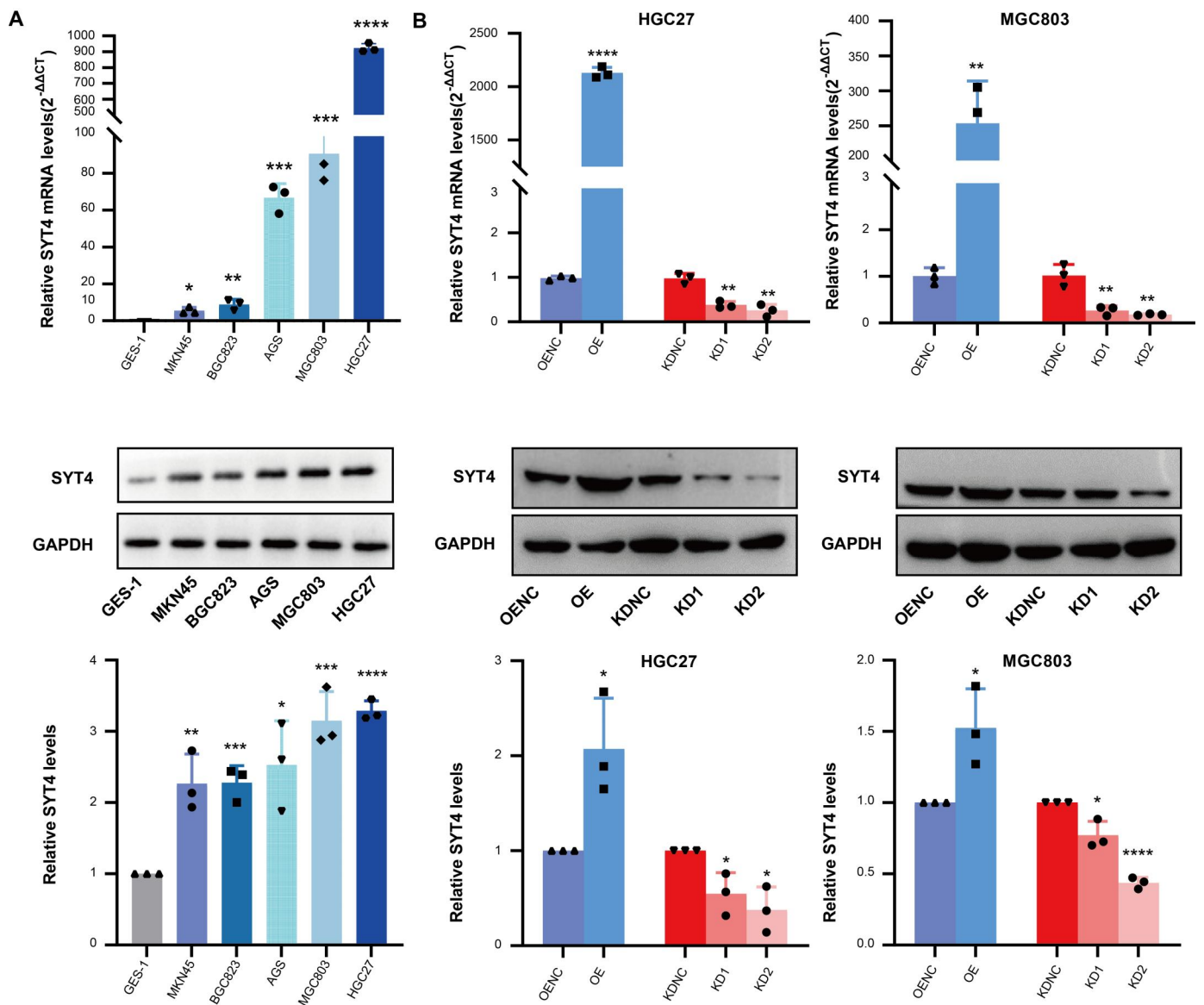
Fig. S2. The expression of SYT4 in different cells. **A** The mRNA levels and protein levels of SYT4 in GES1, AGS, HGC27, BGC823, MKN45 and MGC803 cells were measured by qRT-PCR and WB. **B** The transduction efficiency of SYT4 overexpression and knockdown in HGC27 and MGC803 cells.

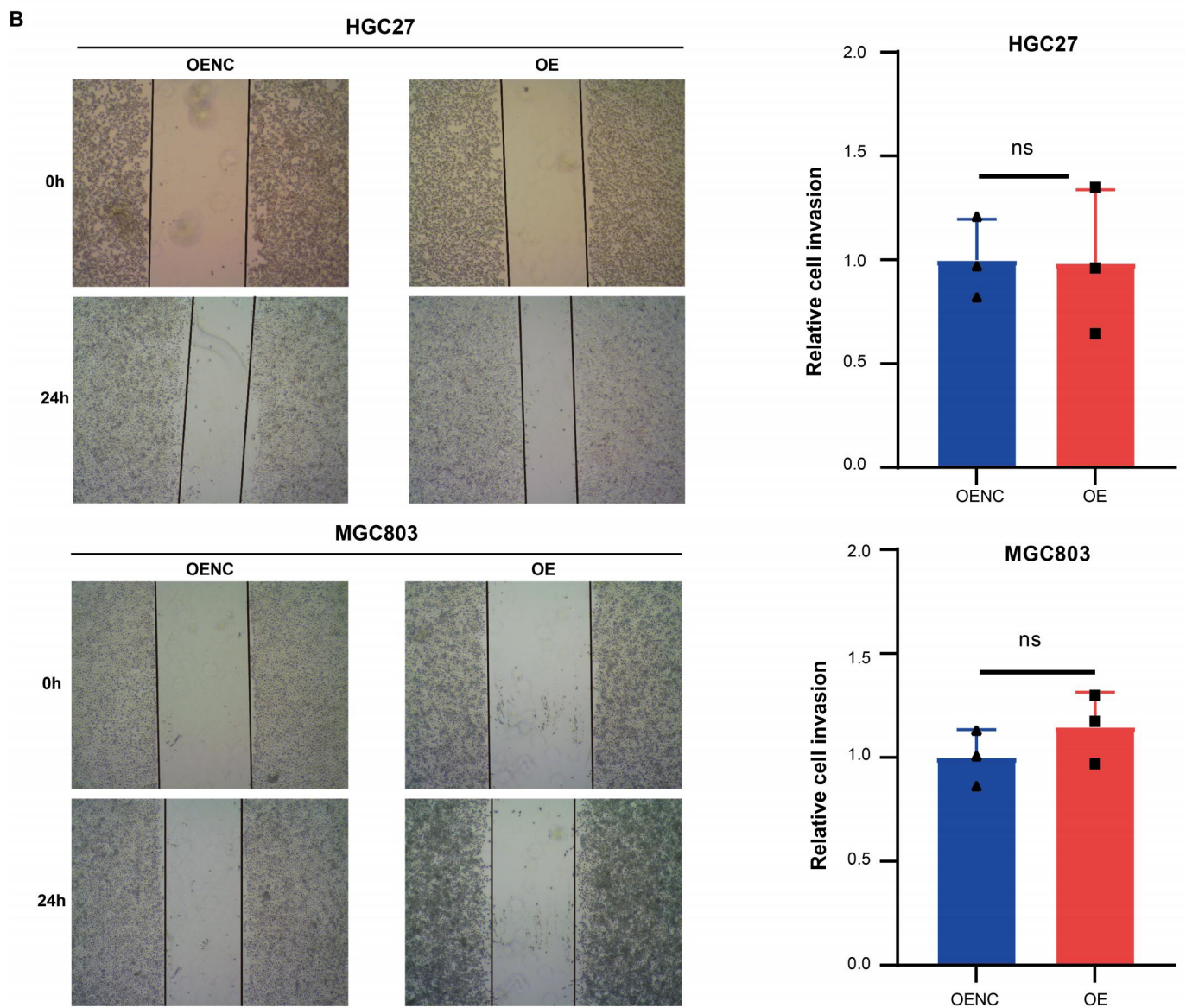
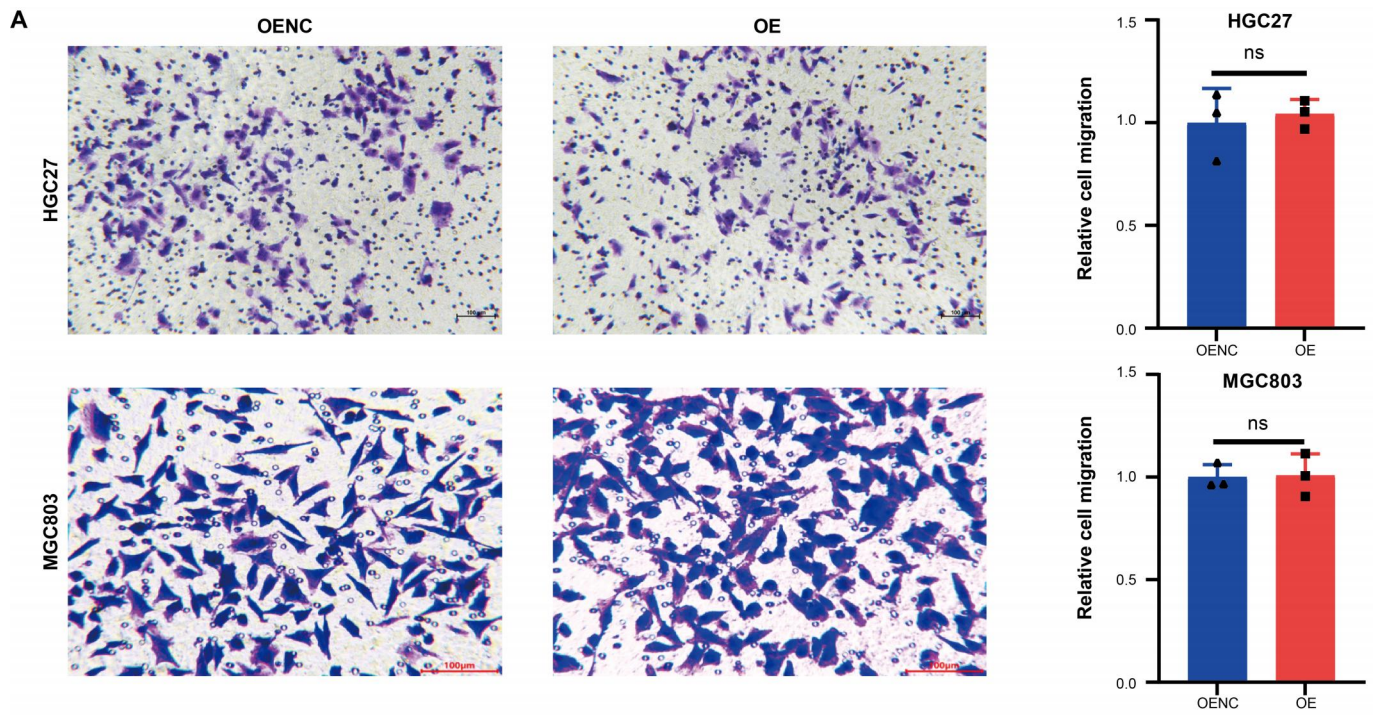
Fig. S3. Effect of SYT4 on the invasion and migration ability of GC cells. **A** and **B** Transwell and scratch assays showed the inefficiency of SYT4 overexpression on the invasion and migration in HGC27 and MGC803 cells.

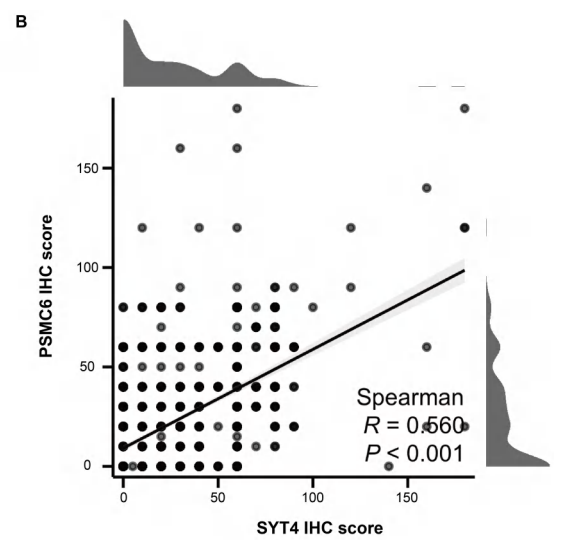
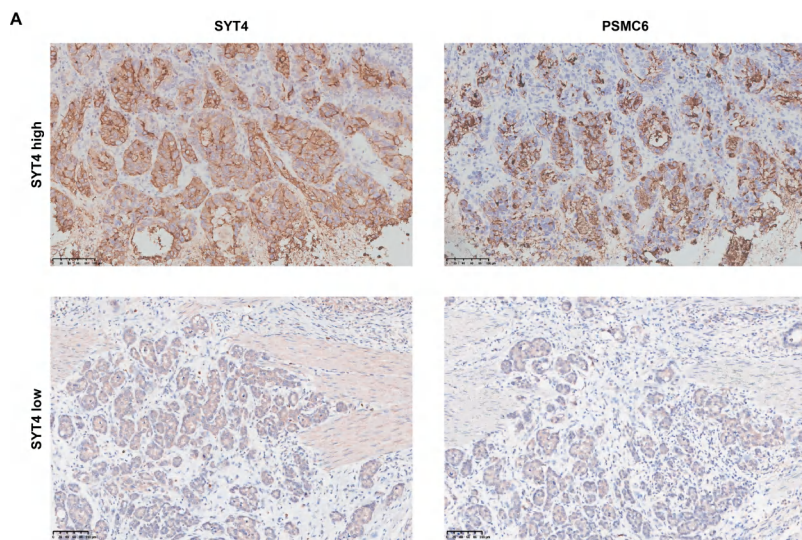
Fig. S4. Correlation between SYT4 and PSMC6 expression in GC. **A** Representative images of SYT4 and PSMC6 staining in GC. **B** Spearman analysis showed the expression of SYT4 and PSMC6 was positively correlated.

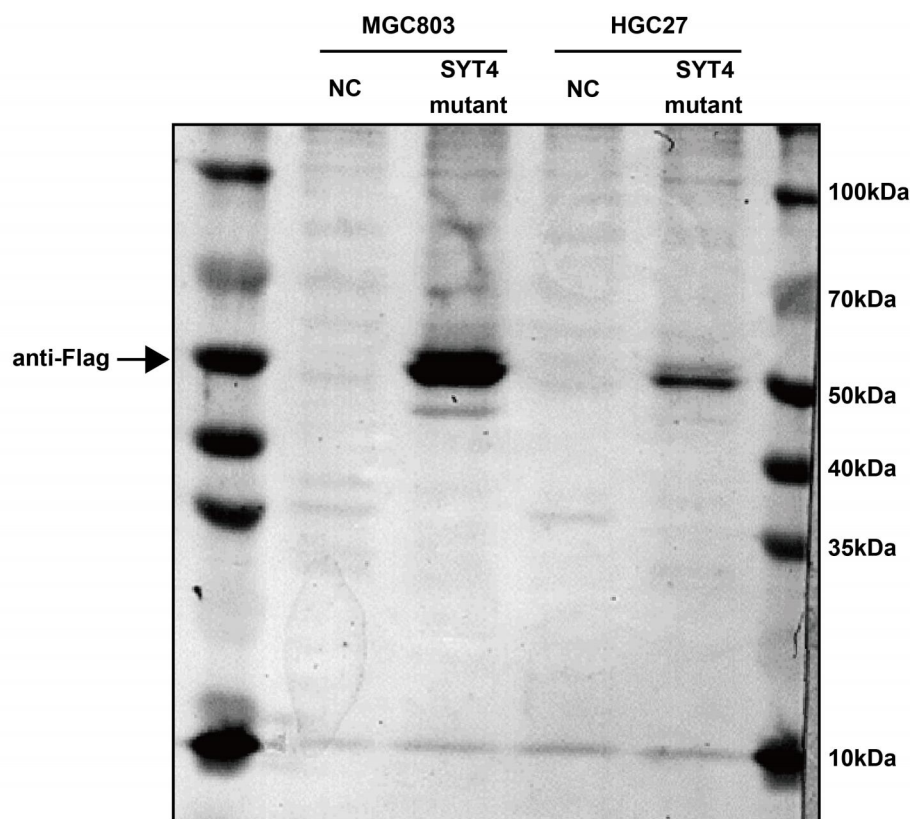
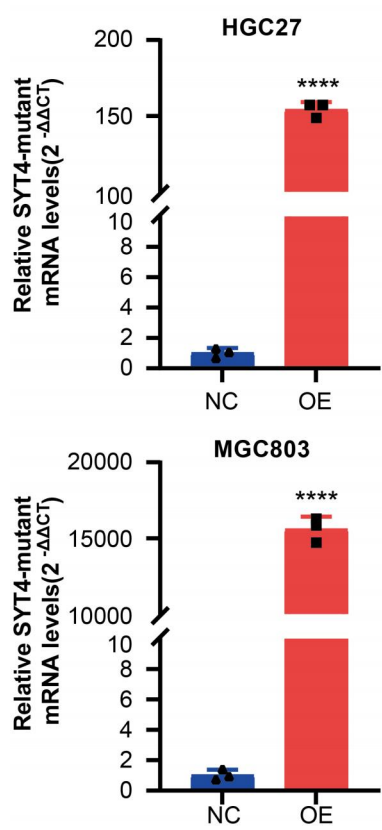
Fig. S5. The transfection efficiency of SYT4-mutant lentivirus.











Supplementary Table S1. The target sequences for shRNAs.

gene		target sequences
shRNA-SYT4	1	GCTCGACATCTGCCTAAATCT
	2	GTGAACAAGCTGAGAAATTAT
shRNA-PSMC6	1	CCAGAGTTATTTTCAGCGTGTA
SYT4-OE	transcript	NM_020783

Supplementary Table S2. The PCR primer sequences.

Primers name		Sequence (5'-3')
SYT4	Forward	TCAGGACGGGGTGAGTTACTG
	Reverse	GTCGAGCTTTTAAGACAACCACA
PSMC6	Forward	GGAGGGCTATCAGAACAGATCC
	Reverse	GGCTCGTGCCAAGAGTGTTT
SYT4-mutant	Forward	TCGGGCAGTTAGTCTTGG
	Reverse	TTGGCAATTTGTCTCCTG
GAPDH	Forward	TGCACCACCAACTGCTTA
	Reverse	GGATGCAGGGATGATGTTC
β -ACTIN	Forward	GACCTGACTGACTACCTCATGAAGAT
	Reverse	GTCACACTTCATGATGGAGTTGAAGG

Supplementary Table S3. Antibodies used for IHC, Western blot, Co-IP and pull-down.

Reagent	Supplier	Catalog number	RRID number
SYT4-antibody	Invitrogen	PA5-87026	AB-2803780
PSMC6-antibody	Abcam	Ab186858	AB-10905872
Ki-67-antibody	Proteintech	27309-1-AP	AB-2756525
AKT-antibody	Abcam	Ab8805	AB-306791
p-AKT (Ser473)-antibody	Abcam	Ab81283	AB-2224551
GSK3 β -antibody	Abcam	Ab32391	AB-2115066
GSK3 β (phosphor S9)- antibody	Abcam	Ab75814	AB-1310289
β -catenin-antibody	Abcam	Ab32572	AB-725966
Anti-Flag Antibody	Abcam	Ab205606	AB-2916341
Anti-6 $\times$ His Tag antibody	Proteintech	66005-1-Ig	AB-11232599
Anti-GST-tag antibody	Proteintech	10000-0-AP	AB-11042316
β -ACTIN	Proteintech	66009-1-Ig	AB-2687938