

Figure S1. Knockdown efficiency of shGSG2 in the injected HuCCT1 cells in the targeted xenograft tissue *in vivo*. GSG2 expression in the shGSG2 and shCtrl mouse tumor tissues was detected by WB. Data are presented as mean \pm SD (n=3), **P<0.01. GSG2, germ cell-specific gene 2 protein; WB, western blotting.

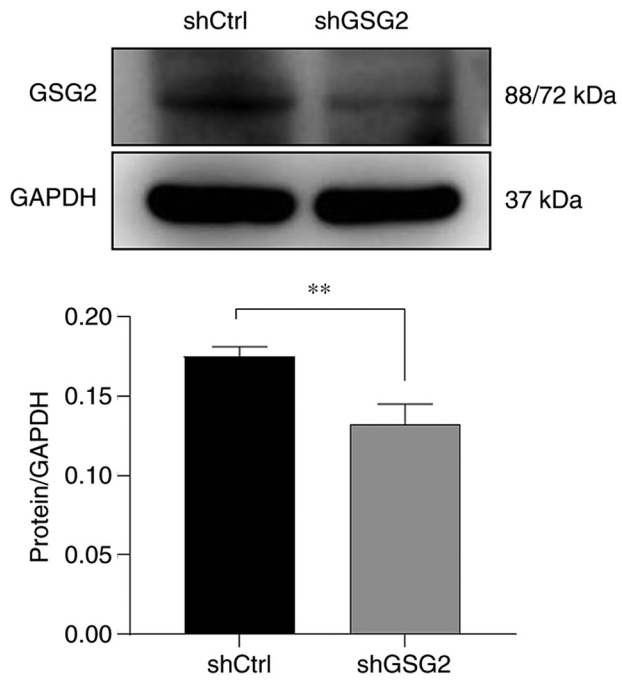


Table SI. Target sequences for the knockdown of GSG2.

Primer name	Sequence (5'-3')
shGSG2-1	CCACAGGACAATGCTGAACTT
shGSG2-2	AAGGAAACTGGTGGTGGGAAA
shGSG2-3	AGGGATTGACTTAGAGCAAAT
Scramble	TTCTCCGAACGTGTCACGT
BR-V108	CCGGTTCTCCGAACGTGTCACGTTTCAAGAGAA

GSG2, germ cell-specific gene 2 protein.

Table SII. Primers used in qPCR.

Primer	Upstream sequence (5'-3')	Downstream sequence (5'-3')
GSG2	GGAAGGGGTGTTTGGCGAAGT	TGAGGAGCAAGGGAGGGTAAG
GAPDH	TGACTTCAACAGCGACACCCA	CACCCTGTTGCTGTAGCCAAA

GSG2, germ cell-specific gene 2 protein; GAPDH, glyceraldehyde 3-phosphate dehydrogenase.

Table SIII. Antibodies used in the western blot analysis.

Antibody name	Protein size (kDa)	Dilution	Antibody source	Company	Catalog/product number
GSG2	88/72	1:1,000	Rabbit	Abcam	ab21686
E-cadherin	135	1:1,000	Rabbit	CST	3195
N-cadherin	125	1:1,000	Rabbit	Abcam	ab18203
Vimentin	57	1:1,000	Rabbit	Abcam	ab92547
Akt	60	1:1,000	Rabbit	CST	4685
p-Akt	60	1:1,000	Rabbit	Bioss	BS-5193R
CCND1	36	1:2,000	Rabbit	CST	2978
MAPK9	48	1:2,000	Rabbit	Abcam	ab76125
GAPDH	37	1:3,000	Rabbit	Bioworld	AP0063

GSG2, germ cell-specific gene 2 protein; Akt, protein kinase B; p-, phosphorylated; CCND1, cyclin D1; MAPK9, mitogen-activated protein kinase 9; GAPDH, glyceraldehyde 3-phosphate dehydrogenase; CST, Cell Signaling Technology, Inc.