

Figure S1. Confirmation of knockdown of COL4A1 expression by reverse transcription-quantitative PCR. \*\*\*P<0.001 vs. COL4A1-NC. COL4A1, collagen  $\alpha$ -1 (IV) chain; MOCK, mock transfection; NC, negative control; SI, short interfering RNA.

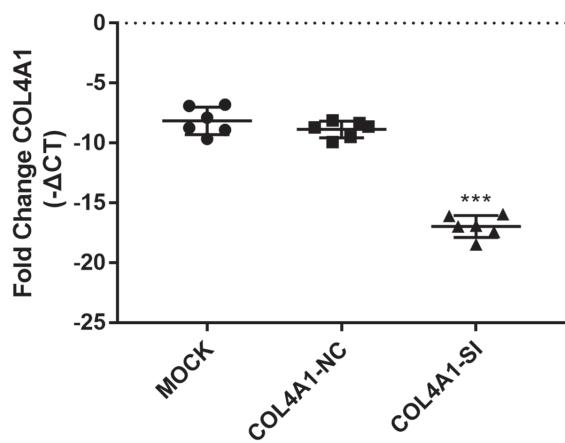


Table SI. Characteristics of patients with glioma based on the Chinese Glioma Genome Atlas.

Item	N (%)
PRS type	
Primary	502 (67.02)
Recurrent	222 (29.64)
Secondary	25 (3.34)
Histology	
A	55 (7.34)
AA	39 (5.21)
AO	22 (2.94)
AOA	80 (10.68)
GBM	176 (23.50)
O	35 (4.67)
OA	95 (12.68)
rA	20 (2.67)
rAA	36 (4.81)
rAO	15 (2.00)
rAOA	48 (6.41)
rGBM	90 (12.02)
rO	4 (0.53)
rOA	9 (1.20)
sGBM	25 (3.34)
WHO grade	
II	218 (29.11)
III	240 (32.04)
IV	291 (38.85)
Sex	
Male	307 (40.99)
Female	442 (59.01)
Age (years)	
≤41	343 (45.79)
>41	406 (54.21)
Radiotherapy	
Yes	625 (83.44)
No	124 (16.56)
Chemotherapy	
Yes	520 (69.43)
No	229 (30.57)
IDH mutation status	
Mutant	410 (54.74)
Wild-type	339 (45.26)
1p19q codeletion	
No	155 (20.69)
Yes	594 (79.31)

IDH, isocitrate dehydrogenase; WHO, World Health Organization; GBM, glioblastoma multiforme; PRS, Primary, Recurrent, Secondary; A, astrocytoma; AA, anaplastic astrocytoma; AO, anaplastic oligodendrogloma; AOA, anaplastic oligoastrocytoma; GBM, glioblastoma multiforme; O, oligodendrogloma; OA, oligoastrocytoma; rA, recurrence of astrocytoma; rAA, recurrence of anaplastic astrocytoma; rAO, recurrence of anaplastic oligodendrogloma; rAOA, recurrence of anaplastic oligoastrocytoma; rGBM, recurrence of glioblastoma multiforme; rO, recurrence of oligodendrogloma; rOA, recurrence of oligoastrocytoma; sGBM, secondary glioblastoma.