

Supplementary Material

# GPT2 Is Induced by Hypoxia-Inducible Factor (HIF)-2 and Promotes Glioblastoma Growth

Bo Zhang <sup>1,†</sup>, Yan Chen <sup>1,†</sup>, Lei Bao <sup>1</sup> and Weibo Luo <sup>1,2,\*</sup>

<sup>1</sup> Department of Pathology, UT Southwestern Medical Center, Dallas, TX 75390, USA

<sup>2</sup> Department of Pharmacology, UT Southwestern Medical Center, Dallas, TX 75390, USA

\* Correspondence: weibo.luo@utsouthwestern.edu; Tel.: +1-214-645-4770

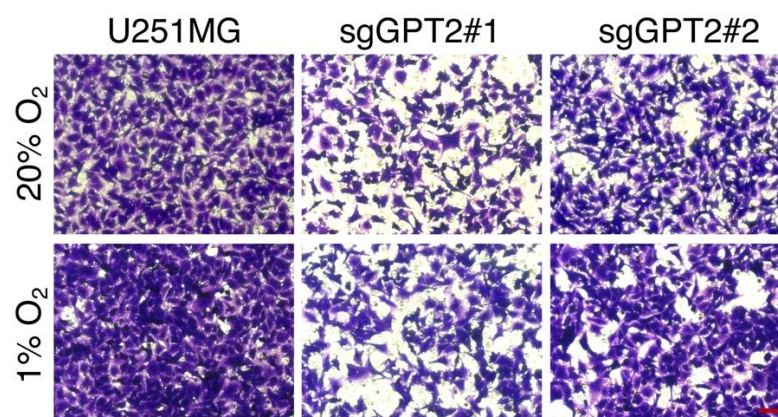
† Both authors contributed equally to this work.

**Table S1.** The sequences of sgRNAs, shRNAs, and HRE.

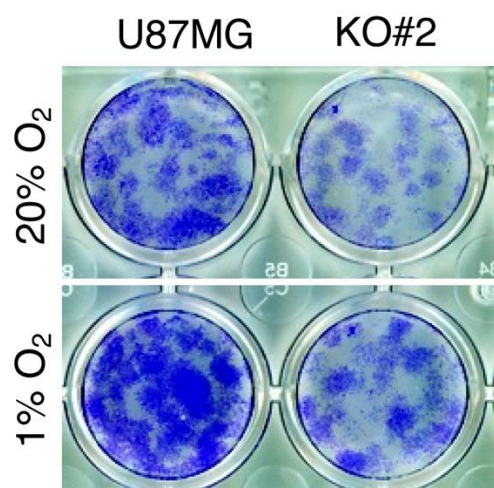
GPT2-sgRNA1	5'-GTCGTGAACCCCCCGGTGGC-3'
GPT2-sgRNA2	5'-AAGATCCTCGTCTCCGGGGG-3'
GPT2-shRNA1	5'-CGGCATTCTACGATCCTGAA-3'
GPT2-shRNA2	5'-GACGCCATCCAGGTGAATTAC-3'
WT GPT2 HRE	5'-GTGCGGCGAGGGCCTACCAGGGGCGACAGGCACGTT GCATGCATGCCTTGGGCGC-3'
Mutant GPT2 HRE	5'-GTGCGGCGAGGGCCTACCAGGGGCGACAGGCTTTTTC CATGCATGCCTTGGGCGC-3'

**Table S2.** The sequences of qPCR primers.

GPT2 mRNA	Forward: 5'-ATGGCACTATGCACCTACCC-3'
	Reverse: 5'-CGGGCACGTTTCTTAGCATC-3'
RPL13A mRNA	Forward: 5'-CTCAAGGTCGTGCGTCTG-3'
	Reverse: 5'-TGGCTTTCTCTTTCCTTCTC-3'
18S rRNA	Forward: 5'-CGGCGACGACCCATTCTGAAC-3'
	Reverse: 5'-GAATCGAACCCTGATCCCCGTC-3'
GPT2 HRE	Forward: 5'-CGCGAGCTAACCGAGTG-3'
	Reverse: 5'-ACACCCAACCGGCTTTC-3'



**Figure S1.** GPT2 promotes GBM cell migration in vitro. Parental and GPT2 knockout U251MG cells were seeded onto transwell inserts and exposed to 20% or 1% O<sub>2</sub> for 16 h. Representative cell migration images are shown. Scale bar, 50 µm.



**Figure S2.** GPT2 promotes GBM cell growth in vitro. Parental and GPT2 KO#2 U87MG cells were exposed to 20% or 1% O<sub>2</sub> for 12 days. Colonies were stained with 0.01% crystal violet and imaged. Representative images are shown.