Supplementary information

ABCG2 regulates self-renewal and stem cell marker expression but not tumorigenicity or radiation resistance of glioma cells

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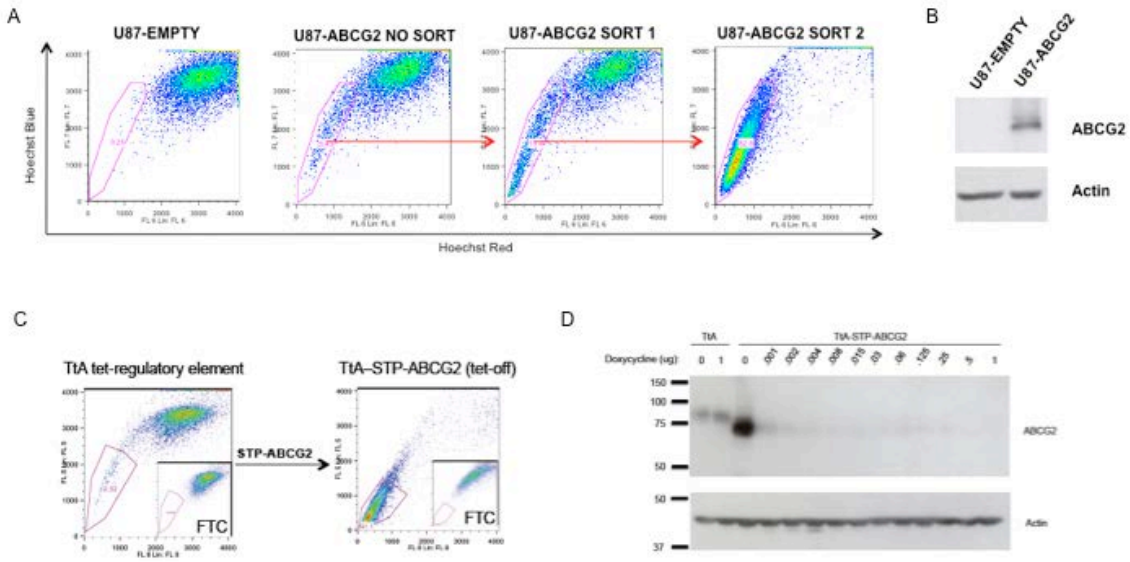
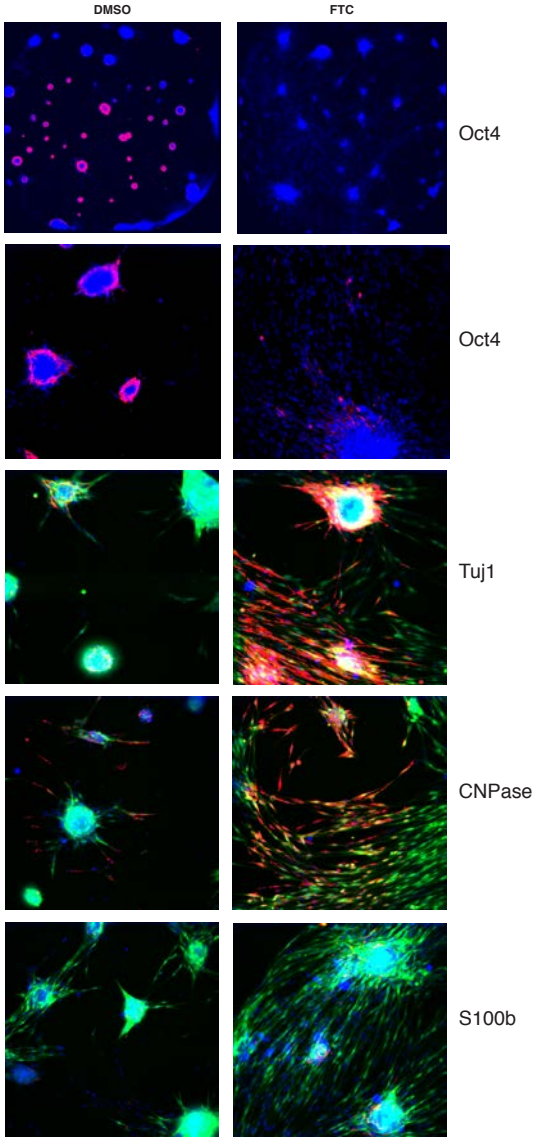
Supplementary Information



Suppl. Fig. S1. Establishing U87MG cell line with high ABCG2 activity and primary cultures with tet-off-ABCG2. (A-B) U87MG cell line with high ABCG2 activity was generated by retroviral transduction of pbabe-ABCG2 and double sorting for SP fraction. (C-D) Tet-off-ABCG2 was generated by stably expressing tet-regulatory element and tet-off-ABCG2. As low as 1 ng of doxycycline was enough to reduce significantly reduce ABCG2 protein levels.



Suppl. Fig. S2. Differentiation and stem cell marker expression following FTC treatment. Additional high-resolution and higher-magnification images of cells presented and studied in Fig. 1g. Blue=DAPI, red=indicated protein, green=GFP (applies to Tuj1, CNPase, S100b).

Suppl. Table S1. List of qRT-PCR primers used in the study

Gene symbol	***Forward Primer 5´->3´***	***Reverse Primer 5´->3´***
MEF/ELF4 (human)	*5'-TGGAAGGCAGTTTTTTGCTGA-3'*	*5'-GACTTCCGCGGTTGACATG-3'*
SOX2 (human)	*5'-GCCTGGGCGCCGAGTGGA-3'*	*5'-GGGCGAGCCGTTCATGTAGGTCTG-3'*
POU5F1 (human)	*5'-GCTCGAGAAGGATGTGGTCC -3'*	*5'-CGTTGTGCATAGTCGCTGCT -3'*
HES1 (human)	*5'-TGGAAATGACAGTGAAGCACCT-3'*	*5'-GTTCATGCACTCGCTGAAGC-3'*
HEY1 (human)	*5'-CGAAATCCCAAACTCCGATA-3'*	*5'-TGGATCACCTGAAAATGCTG-3'*
HEY2 (human)	*5'-TTGTCAGTATCAGCCACGTC-3'*	*5'-AGTTACCGAGCTGCCTTGAA-3'*
ID1 (human)	*Purchased from Qiagen (QT00230650)*	
ID4 (human)	*5'-GTGCGATATGAACGACTGCT-3'*	*5'-CAGGATCTCCACTTTGCTGA-3'*
18S (human)	*5'-GTAACCCGTTGAACCCCATT-3'*	*5'-CCATCCAATCGGTAGTAGCG-3'*
Mef/Elf4 (mouse)	*5'-TCCTGGATGAGAAGCAGATCTTCA-3'*	*5'-ATGGTGCTGCCTTTGCCATC-3'*

Sox2 (mouse)	*5'-TCCAAAAACTAATCACAACAATCG-3'*	*5'-GAAGTGCAATTGGGATGAAAA-3'*
Pou5f1 (mouse)	*5'-GTTGGAGAAGGTGGAACCAA-3'*	*5'-CTCCTTCTGCAGGGCTTTC-3'*
Hes1 (mouse)	*5'-TGCCAGCTGATATAATGGAGAA-3'*	*5'-CCATGATAGGCTTTGATGACTTT-3'*
Hey1 (mouse)	*5'-CATGAAGAGAGCTCACCCAGA-3'*	*5'-CGCCGAACTCAAGTTTCC-3'*
Id1 (mouse)	*Purchased from Qiagen (QT01743756)*	
Klf4 (mouse)	*5'-GCGGGCTGATGGGCAAGTTTGT-3'*	*5'-TGCCGTCTGGGCTTCCTTTGCT-3'*
cMyc (mouse)	*5'- GACAGCAGCTCGCCCAAAT -3'*	*5'- AGCAGCGAGTCCGAGGAA -3'*
Gapdh (mouse)	*5'-TGGCAAAGTGGAGATTGTTGCC-3'*	*5'-AAGATGGTGATGGGCTTCCCG-3'*