Supplementary Material

**Supplementary Table 1.** Sequences of primers used for qPCR.

Supplementary Figure 1. Expression of BRG1-regulated genes identified in the Nanostring array was determined by qPCR. Total RNA was prepared from control X16 GICs (treated with scrambled shRNA) and BRG1-KD GICs, and gene expression was determined by qPCR. \*  $p \le 0.05$  was considered to be statistically significant.

Supplementary Figure 2. Protein-protein interaction (PPI) network analysis of genes upregulated by BRG1-KD. The PPI network analysis was performed by using Enrichr, a comprehensive gene set enrichment analysis web server (<a href="http://amp.pharm.mssm.edu/Enrichr/">http://amp.pharm.mssm.edu/Enrichr/</a>). PPI identified STAT3 as a network hub of genes upregulated by BRG1, implicating a role of BRG1 in modulating STAT3-dependent transcription.

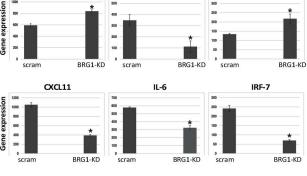
Supplementary Figure 3. TXNIP protein expression in X10 GICs harboring the inducible knockdown of STAT3 and rescue with wtSTAT3. Protein lysates from control, STAT3-KD and STAT3 rescued BRG1-KD X10 GICs were immunoblotted for pTyr-STAT3, total STAT3, TXNIP and actin.

Supplementary Figure 4. TXNIP gene expression in X16 and X16 BRG1 KD tumor tissue. RNA was prepared from, control X16 GICs, BRG1-KD X16 GICs, and X16 GICs with both BRG1 and TXNIP (DKD) knocked down, and GLUT1, FBP2 and PKM was determined by qPCR. Data was expressed relative to gene expression in control X16 GICs.

## **Supplementary Table 1. Sequences of primers used in qPCR**

Target	Sequence (5'-3')
POLR2A	5'ATGTCTGTGACGGAGGGTGGCA 3'GGCCAGGACACTCTGTCATGTTT
STAT3	5'CAGCAGCTTGACACACGGTA 3'GCCCAATCTTGACTCTCAATCC
BRG1	5'TACAAGGACAGCAGTGG 3'TCCAGGTTGAAGGTCTGTGC
CD44	5'TTACAGCCTCAGCAGAGCAC 3'TGACCTAAGACGGAGGGAGG
OCT4	5'CTTGAATCCCGAATGGAAAGGG 3'GTGTATATCCCAGGGTGATCCTC
NANOG	5'ATAACCTTGGCTGCCGTCTC 3'AGCCTCCCAATCCCAAACAA
TXNIP	5'ATATGGGTGTGTAGACTACTGGG 3'GACATCCACCAGATCCACTACT
GLUT1	5'GGCTTCTCCAACTGGACCTC 3'CCGGAAGCGATCTCATCGAA
PKM	5'AATGCAGTCCTGGATGGAGC 3'CAAGTGGTAGATGGCCAGCCT
FBP2	5'CCCACATGCCCTCTTCTGTT 3'CCATAGAATCGCCTGTGGCT
MGMT	5'ACCGTTTGCGACTTGGTACT 3'GGGCTGGTGGAAATAGGCAT
CXCL11	5'GACGCTGTCTTTGCATAGGC 3' GGATTTAGGCATCGTTGTCCTTT
LIF	5'TACGCCACCCATGTCACAAC 3'CTTGTCCAGGTTGTTGGGGA
IL6	5' ACTCACCTCTTCAGAACGAATTG 3' CCATCTTTGGAAGGTTCAGGTTG
IRF7	5' GCTGGACGTGACCATCATGTA 3' GGGCCGTATAGGAACGTGC

TXNIP promoter chip primers	
Target	Sequence (5'-3')
	5'AGGCTCTTTAACAGCAATGA
STAT3-I	3'TGCTGGGGTATCAGAAGATT
	5'CTCGCGTGGCTCTTCTG
STAT3-II	3'GCAGGAGGCGGAAACGT
STAT3-III	5'CAGCGATCTCACTGATTG 3'AGTTTCAAGCAGGAGGCG

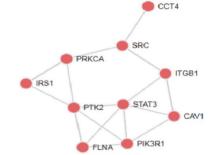


SOCS1

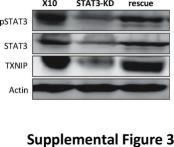
LIF

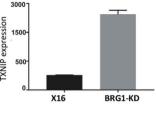
**Supplemental Figure 1** 

TXNIP



## **Supplemental Figure 2**





Supplemental Figure 4