

Supplemental Table Legends

Table S1. GS6-22 cells were treated with S3I-201 (50uM) or DMSO control for 3 days. ChIP Sequencing analysis using H3K27me3 antibody yielded a list of gene promoters that likely show a reduction in repressive H3K27me3 mark upon S3i treatment.

Table S2. GS6-22 cells were treated with S3I-201 (50uM) or DMSO control for 3 days. Microarray analysis yielded a list of genes that likely show 2 fold or higher gene expression upon S3i treatment.

Table S3. GS6-22 cells were treated with S3I-201 (50uM) or DMSO control for 3 days. Intersected list of genes showing both reduction in repressive H3K27me3 mark as well as 2 fold or higher gene expression upon S3i treatment.

Supplemental Experimental Procedures

qRT-PCR primers

Jmjd3 forward: CTACCCCCCTCACATGGCAG;
Jmjd3 reverse: CTCTGACTCGTACAGTTGCC;
Myt1 forward: TGCTTGCCCCAAAGATTCAA;
Myt1 reverse: AGTGCTCCTCACATAACTACTGG;
 β III-tubulin forward: GCCTCTTCTCACAAAGTACGTG;
 β III-tubulin reverse: CCCCACTCTGACCAAAGATGAA;
 β -actin forward: CCTGGGCATGGAGTCCTGTGG;
 β -actin reverse: CTGTGTTGGCGTACAGGTCTT;
FGF21 forward: CTGTGGGTTCTGTGCTGG;
FGF21 reverse: CCGGCTTCAAGGCTTCAG;
GDF15 forward: ACCTGCACCTGCGTATCTCT;
GDF15 reverse: CGGACGAAGATTCTGCCAG.

Nano-ChIP-Seq Library preparation primers

Primer 1: GACATGTATCCGGATGTA [X] NNNNNNNNN;

where [X] denotes the custom barcodes for each sample as specified below:

ATCACG;
TTAGGC;
ACAGTG;
GATCAG;

TAGCTT;
GGCTAC;
Primer 2: GACATGTATCCGGATGT.

ChIP primers

Jmjd3 forward: AGGAAGAGCTGGGGCTAAAG;
Jmjd3 reverse: CTGGCTTCTGGGTCTCAA;
Myt1 forward: AGGCACCTTCTGTTGCCGA;
Myt1 reverse: AGGCAGCTGCCTCCCGTACA;
FGF21 forward: CACAGTGCTGGGATTACCG;
FGF21 reverse: AGACGCTGGCCAAGTAGAGA;
GDF15 forward: CAGGCACAGTGTCAACCAAG;
GDF15 reverse: AGGTTGCAGTGAGCCAAGAT.

Supplemental References

Wakimoto, H., Mohapatra, G., Kanai, R., Curry, W.T., Jr., Yip, S., Nitta, M., Patel, A.P., Barnard, Z.R., Stemmer-Rachamimov, A.O., Louis, D.N., et al. (2012). Maintenance of primary tumor phenotype and genotype in glioblastoma stem cells. *Neuro Oncol* 14, 132-144.