

Supplemental Data

Differential Sensitivities of Fast- and Slow-Cycling Cancer Cells to Inosine Monophosphate Dehydrogenase 2 Inhibition by Mycophenolic Acid

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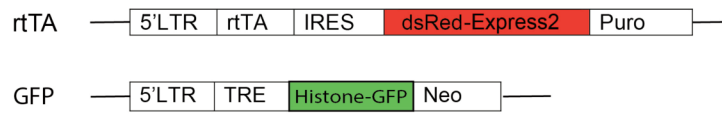
Supplementary Table S1. STR genotyping of seven cancer cell lines.

STR	Panc-1	BxPC-3	Caco2	HeLa	HepG2	HuH7	SKOV-3
D3S1358	17	14/16	14/17	18/18	15/16	15/15	14/14
TH01	7/8	9	6	7/7	9/9	7/7	9/9,3
D21S11	28	29	30	27/28	29/31	30/30	30/31,2
D18S51	12	12	12	uitval	13	uitval	16/17/18
Penta_E	7/14	12/14	7	uitval	15/20	11/11	5/13
D5S818	11/13	11	12/13	12/14	11/13	12/12	11/11
D13S317	11	11	11/13/14	12/14	9/13	10/11	8/11
D7S820	8/10	10/13	11/12	8/12	10/10	10/11	13/14
D16S539	11	9/11	12/13	10/10	12/13	10/10	12/12
CSF1PO	10/12	13	11	9/10	10/11	11/11	11/11
Penta_D	14	14	9	8/8	9/13	12/12	12/13
AMEL	X	X	X	XX	XY	XX	XX
vWA	15	14/18	16/18	16/18	17/17	16/18	17/18
D8S1179	14/15	13	12/14	uitval	15/16	14/14	14/15
TPOX	8/11	8	9/11	8/12	8/9	8/11	8/11
FGA	21	20/21	19	21	22/25	22/22	24/25
Match	87%	81%	77%	84%	74%	94%	71%

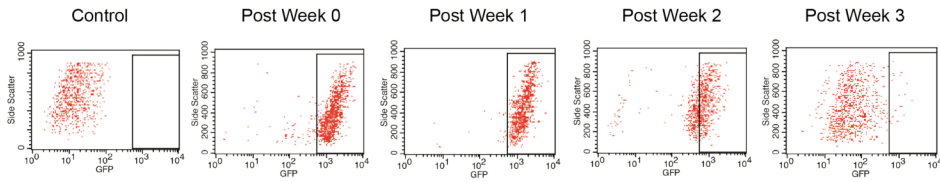
The STR match threshold are range from 71% to 94%.

STR genotyping information come from the website: <http://strdb.cogcell.org/>.

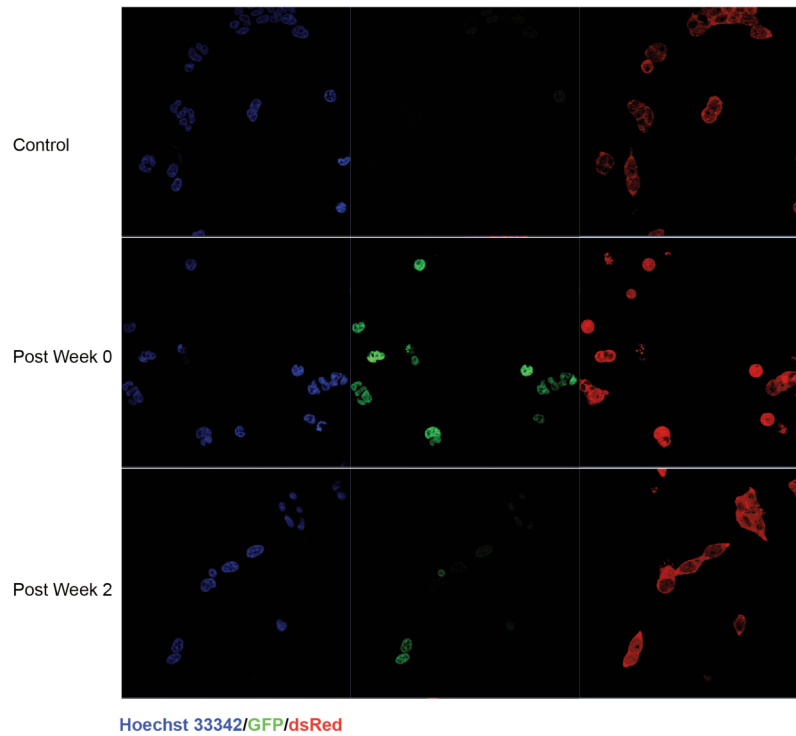
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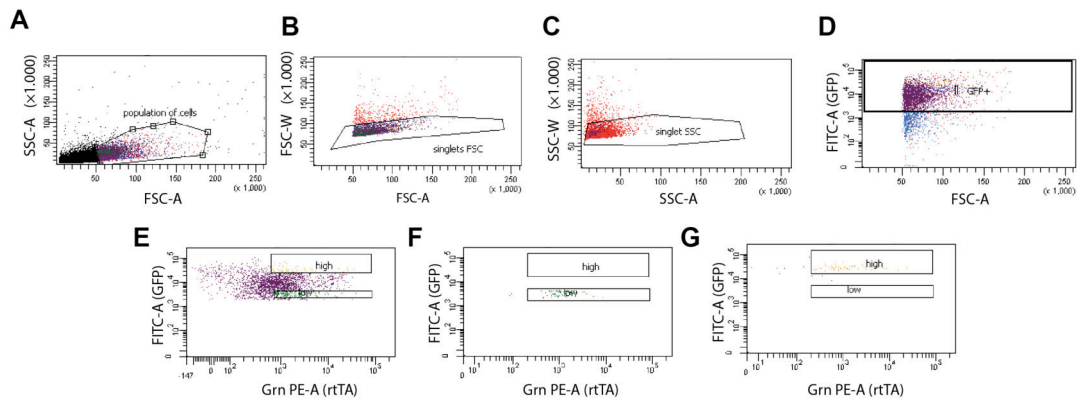
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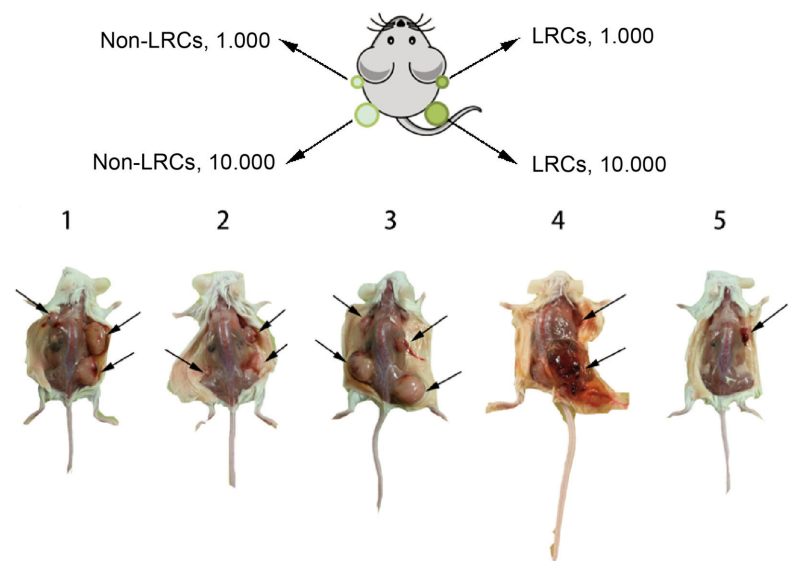
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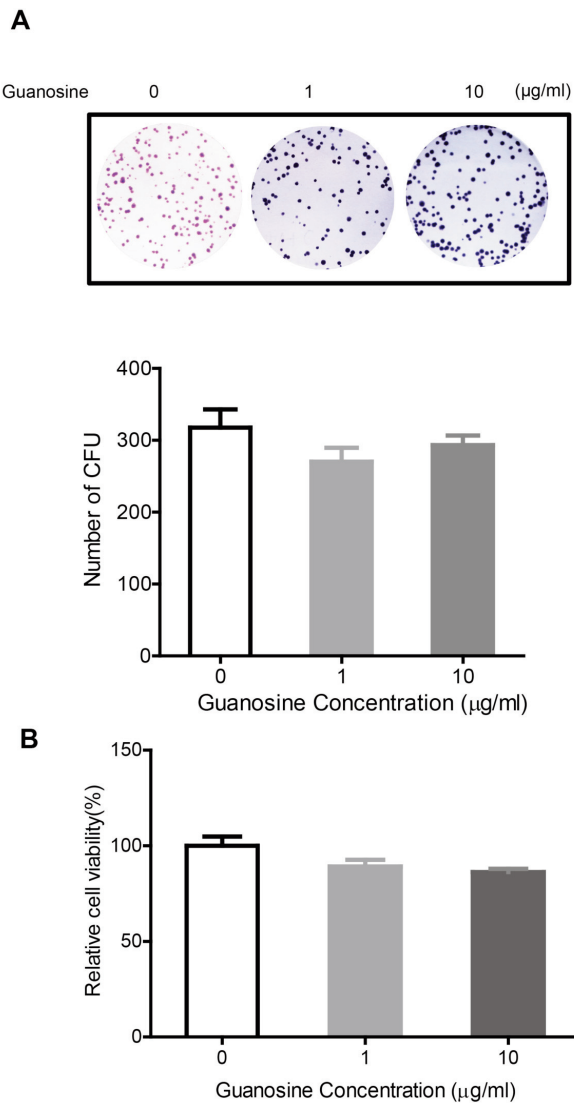
Supplementary Figure S1. Label retaining HeLa^{tet-on} cell line expressing histone2B-GFP in a Tet-inducible fashion. (A) Plasmids pLV.EX3D/EF1A-rtTA(M2)-dsRed-Express2 and pLV.EX2D/TRE-eGFP were used. (B,C) GFP retaining condition *in vitro* could be detected even 3 wks after doxycycline withdraw.



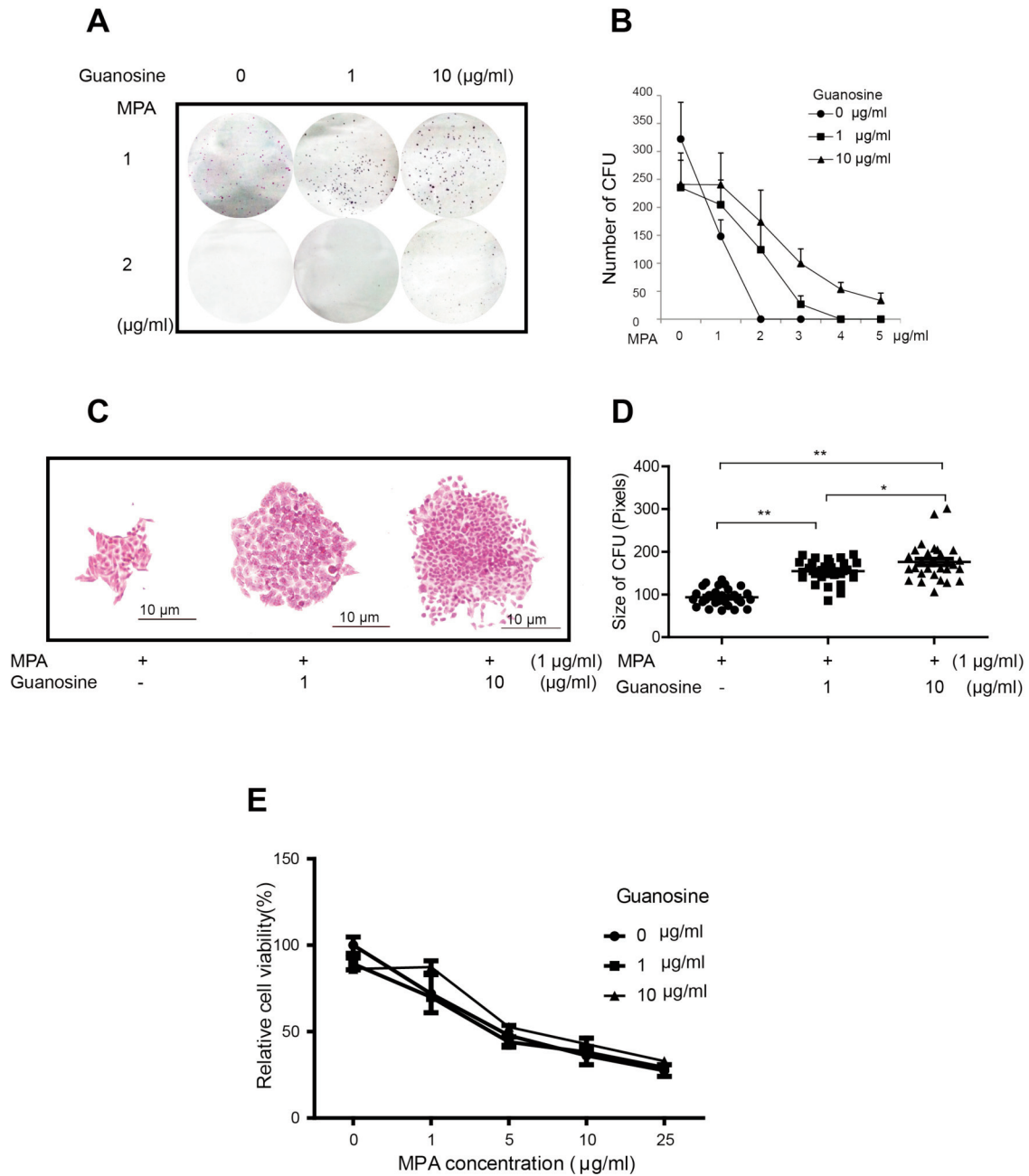
Supplementary Figure S2. Tumor tissue were dissociated into single cell suspension and sorted for Non-LRCs (GFP^{low}dsRed) and LRCs (GFP^{high}dsRed) by FACS.



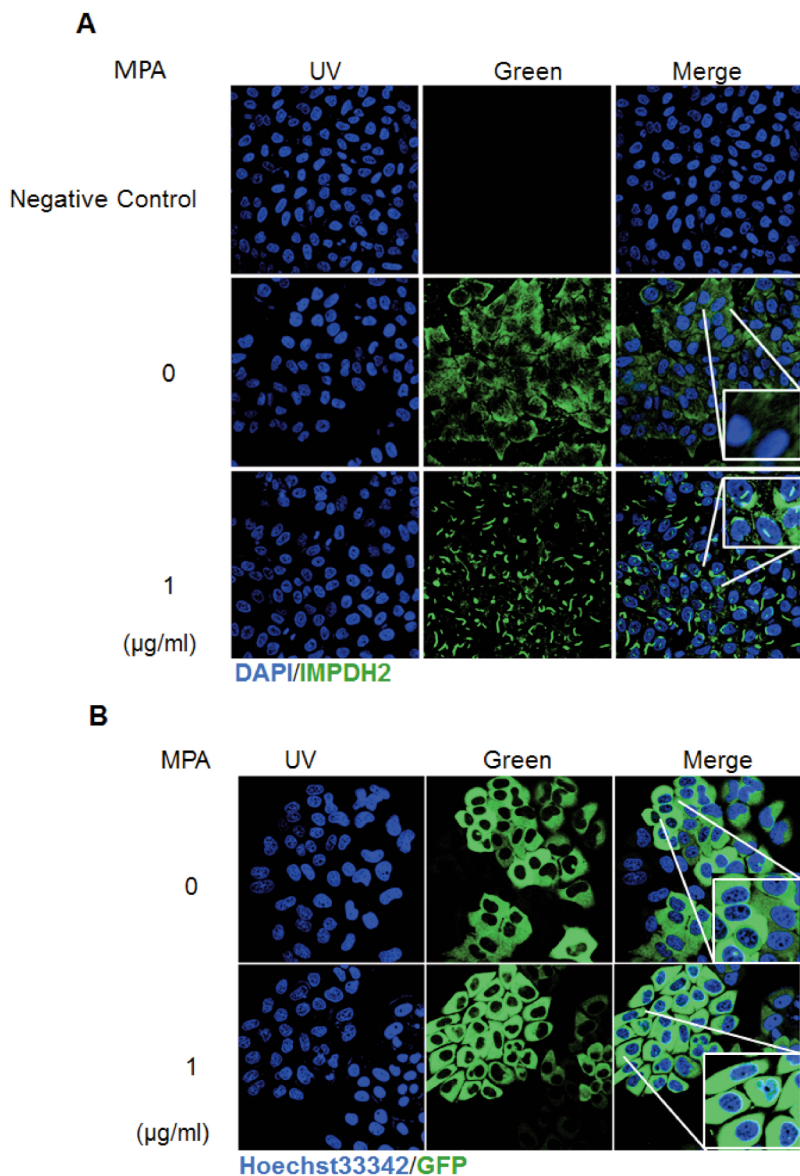
Supplementary Figure S3. Non-LRCs and LRCs were injected subcutaneously into mice with cell number of 1.000 and 10.000 on four sites. Arrows indicate tumor formation.



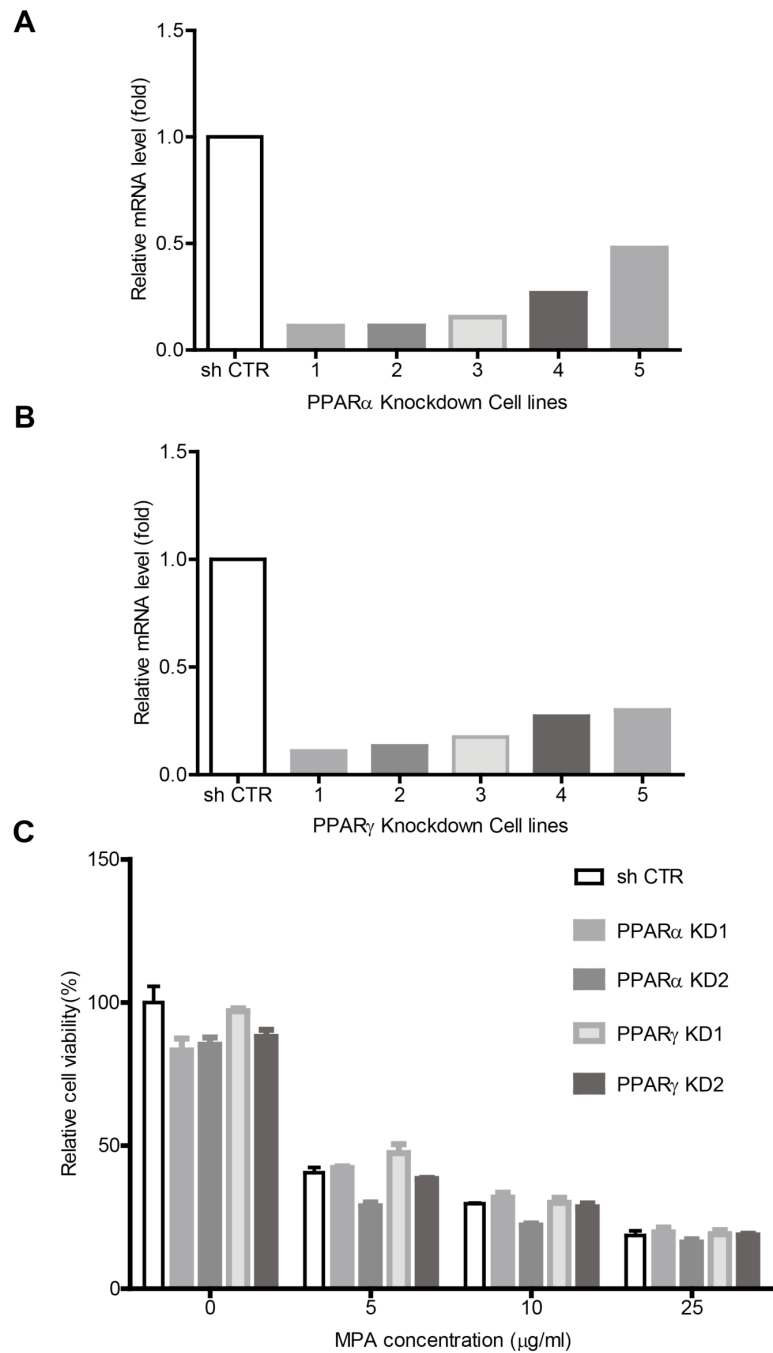
Supplementary Figure S4. Guanosine alone did not significantly affect cell proliferation. (A) CFU appearance and numbers. (B) MTT assay.



Supplementary Figure S5. Anti-proliferative effects of MPA were partially restored by supplementation of exogenous guanosine. (A,B) The number of CFU, (C,D) The size of CFU were partially restored by supplementation of exogenous guanosine during treatment of the HeLa cell line with MPA (Mean ± SD or SEM, n = 6 or 30, respectively, *P < 0.05; **P < 0.01).



Supplementary Figure S6. Cellular localization of IMPDH2 protein. (A) IMPDH2 protein predominately located in cytoplasm, but translocate into nucleus upon MPA treatment in HeLa cells. Blue: DAPI nuclear staining. Green: antibody against Human IMPDH2. (B) A mutated IMPDH2 (fused with GFP) lacking the binding site of MPA was not able to translocate into nucleus even with treatment of MPA in HeLa cells. Blue: DAPI nuclear staining. Green: GFP



Supplementary Figure S7. Knockdown of PPAR α or PPAR γ did not affect the sensitivity of HeLa cells to MPA treatment. (A,B) Relative mRNA levels of PPAR α or PPAR γ in HeLa cells transduced with 5 different lentiviral shRNA clones, GAPDH was used as an internal reference. (C) Clone 1 (KD1) and 2 (KD2) for each gene were selected to perform MTT assay.