

Supplementary**Table 1** DNMT3A siRNA sequences (19nt) for knocking down DNMT3A in HCC cell lines

Constructs	Sequences (5'—3')
pMT3A1	ACTGACGTCTCCAACATGA
pMT3A2	CCAGATGTTCTTCGCTAAT
pMT3A3	ATGACGAGCCAGAGTACGA
sMT3A2 (scrambled seq.)	AGGTTCCCTCATTGCTACTA

Table 2

Gene functions	Gene Symbol	Transcript ID	CpG island(CGI)
cell adhesion	MCAM	NM_006500	CGI
	L1CAM	NM_000425	NO
	SSX2IP	NM_014021	CGI
proteolysis	ADAM20	NM_003814	NO
	CRBN	NM_016302	CGI
	ADAMTS6	NM_197941	NO
mitochondrion	DNM1L	NM_005690	CGI
	DCTN6	NM_006571	CGI
	MRPS14	NM_022100	NO
apoptosis	TAX1BP1	NM_006024	CGI
	FXR1	NM_001013438	CGI
	BNIP2	NM_004330	CGI
	TNFAIP8	NM_014350	NO
chromatin modification	HAT1	NM_003642	CGI
	H2AFV	NM_012412	CGI
	CHMP5	NM_016410	CGI
	C11orf30	NM_020193	CGI
translation	BZW1	NM_014670	CGI
	EIF4E	NM_001968	CGI
	MTIF2	NM_001005369	CGI
	EIF5B	NM_015904	CGI
cytoskeleton	CAPZA2	NM_006136	CGI
	RDX	NM_002906	CGI
	MAP7	NM_003980	CGI
	MYO5A	NM_000259	CGI
	SDCBP	NM_001007067	CGI
mitosis	KIF22	NM_007317	CGI
	CCNG1	NM_004060	CGI
	KNTC2	NM_006101	CGI
	STAG2	NM_006603	CGI
	PBK	NM_018492	CGI
ubiquitin cycle	RKHD2	NM_016626	CGI

	APG12L	NM_004707	CGI
	UCHL5	NM_015984	CGI
	APPBP1	NM_001018159	CGI
	UBE1C	NM_003968	CGI
	FBXO40	NM_016298	CGI
post-translational modification			
	DPM1	NM_003859	CGI
	GOLGA5	NM_005113	CGI
	PTPN12	NM_002835	CGI
	MASK	NM_016542	CGI
	PRPF4B	NM_003913	NO
	IKBKB	NM_001556	CGI
signal transduction			
	SH3BP5	NM_001018009	CGI
	SCYE1	NM_004757	CGI
	HBS1L	NM_006620	CGI
	RAB11A	NM_004663	NO
	RAP2C	NM_021183	CGI
	STC1	NM_003155	CGI
	TTRAP	NM_016614	NO
signaling pathway			
	LANCL1	NM_006055	NO
	AKAP12	NM_005100	CGI
	F2RL2	NM_004101	NO
	CRHR1	NM_004382	CGI
	GNAI3	NM_006496	CGI
	ITGB1	NM_002211	CGI
	HOMER3	NM_004838	CGI
	PIG8	NM_014679	CGI
metabolism			
	FPGT	NM_003838	CGI
	LYPLA1	NM_006330	CGI
	DCK	NM_000788	CGI
	PSMC6	NM_002806	NO
	HMGCS1	NM_002130	CGI
	SC5DL	NM_001024956	CGI
	SUCLA2	NM_003850	CGI
	XYLB	NM_005108	CGI
	ENPP4	NM_014936	CGI
	MOXD1	NM_015529	CGI
cell cycle			
	CDC2	NM_001786	CGI
	PTEN	NM_000314	CGI
	TTK	NM_003318	CGI

	GNL3	NM_014366	CGI
	CUL2	NM_003591	CGI
	10-Sep	NM_144710	CGI
	PTP4A1	NM_003463	CGI
	KLK10	NM_002776	CGI
	PPP1CB	NM_002709	CGI
	NIPBL	NM_015384	CGI
	CD164	NM_006016	CGI
	ADAMTS1	NM_006988	CGI
	TGFA	NM_003236	CGI
transcription			
	BCLAF1	NM_014739	CGI
	TCERG1	NM_006706	NO
	COPS2	NM_004236	NO
	PSIP1	NM_021144	CGI
	CDC5L	NM_001253	NO
	LRRFIP1	NM_004735	CGI
	CBFB	NM_001755	CGI
	FUSIP1	NM_006625	NO
	SCML1	NM_006746	CGI
	PC4	NM_006713	CGI
	TERF1	NM_003218	NO
	TBL1XR1	NM_024665	CGI
	ZNF12	NM_016265	CGI
	BACH1	NM_001011545	NO
molecular transport			
	SLC25A24	NM_013386	CGI
	SLC38A2	NM_018976	CGI
	OSBPL3	NM_015550	CGI
	SNX2	NM_003100	CGI
	CLPX	NM_006660	CGI
	ETFDH	NM_004453	CGI
	ATP5L	NM_006476	NO
	HSPCA	NM_001017963	CGI
	SEC23A	NM_006364	CGI
	SLC30A1	NM_021194	CGI
	ATP2B1	NM_001001323	NO
	ARL10C	NM_018184	NO
	RAP2C	NM_021183	CGI
	SEC24B	NM_006323	CGI
	ATP6V1C1	NM_001007254	CGI
	FABP4	NM_001442	CGI
	PREI3	NM_015387	CGI
	AP1S1	NM_001283	CGI

	CYP1A1	NM_000499	CGI
	ATP4A	NM_000704	NO
	SCP2	NM_001007098	NO
	SLC7A11	NM_014331	NO
	FMO3	NM_001002294	NO
	STAM2	NM_005843	CGI
	NDUFA5	NM_005000	NO
	SEC63	NM_007214	CGI
Other functions			
	DAF	NM_000574	CGI
	C4BPB	NM_000716	NO
	ORC4L	NM_002552	CGI
	RAD51AP1	NM_006479	NO
	ECT2	NM_018098	NO
	ARPP-19	NM_006628	CGI
	IDI1	NM_004508	CGI
	EIF3S6	NM_001568	NO
	CLEC2B	NM_005127	NO
	MLF1	NM_022443	NO
	HMMR	NM_012484	CGI
	SR140	XM_031553	NO
	HSPA4	NM_002154	CGI
	CENTB2	NM_012287	CGI
	C15orf15	NM_016304	NO
	PSG3	NM_021016	NO
	TFPI	NM_006287	NO
	BMP5	NM_021073	NO
	DNAJB4	NM_007034	NO
	FAM12A	NM_006683	NO
	BBS7	NM_018190	NO
	IFRD1	NM_001007245	CGI
	C1D	NM_006333	NO
	TSNAX	NM_005999	CGI
	PDCD10	NM_007217	CGI
	STCH	NM_006948	CGI
	DDX50	NM_024045	CGI
	ZCCHC10	NM_017665	CGI
	ZNFN1A3	NM_012481	NO
	C13orf10	NM_022118	CGI
	CMAH	NR_002174	NO
	SH3BGRL	NM_003022	NO
