

The impact of SWI/SNF and NuRD inactivation on gene expression is tightly coupled with levels of RNA Polymerase II occupancy at promoters

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Supplementary Tables

Supplementary Table S1: Accession identifiers for the data sources used in this study.

ChIP-seq	Cell type	Condition	Experiment ID	Sample ID
H3K4me1	ESC	WT	GSE90895	SRR5077636
H3K4me1	MEF	WT	GSE90895	SRR5077633
H3K4me3	ESC	WT	GSE90895	SRR5077628
H3K4me3	MEF	WT	GSE90895	SRR5077625
H3K27ac	ESC	WT	GSE90895	SRR5077644
H3K27ac	MEF	WT	GSE90895	SRR5077641
H3K27me3	ESC	WT	GSE90895	SRR5077648
H3K27me3	MEF	WT	GSE90895	SRR5077645
H3.3	ESC	WT	GSE90895	SRR5077664
H3.3	MEF	WT	GSE90895	SRR5077661
H2A.Z	ESC	WT	GSE34483	SRR390384, SRR390385
H2A.Z	MEF	WT	GSE51579	SRR1015560

CHD4	ESC	WT	GSE64825	SRR1747931, SRR1747932
CHD4	ESC	WT	GSE117289	SRR7535484, SRR7535485
BRG1	ESC	WT	GSE64825	SRR1747925, SRR1747926
BRG1	ESC	WT	GSE111264	SRR7724001
P300	ESC	WT	GSE90895	SRR5077717
P300	MEF	WT	GSE90895	SRR5077714
RING1B	ESC	WT	GSE23716	SRR068919
EZH2	ESC	WT	GSE13084	SRR015128, SRR015129
SUZ12	ESC	WT	GSE13084	SRR015132, SRR015133, SRR015134
MBD3	ESC	WT	GSE31690	SRR341119, SRR341120
MBD3	ESC	WT	GSE117289	SRR7535482, SRR7535483
CHD4	MEF	WT	GSE49766	SRR950334
BRG1	MEF	WT	GSE71509	SRR2133580
MBD3	MEF	WT	GSE49766	SRR950328
EZH2	MEF	WT	GSE36905	SRR944133
Pol II	ESC	WT	GSE98063	SRR5466757, SRR5466758
Pol II Ser-5p	ESC	WT	GSE20485	SRR036733
Pol II Ser-2p	ESC	WT	GSE20485	SRR036734, SRR036735, SRR036736
Pol II	MEF	WT	GSE45517	SRR797521, SRR797523
Pol II Ser-5p	MEF	WT	GSE106313	SRR6234165, SRR6234166
Pol II Ser-2p	MEF	WT	GSE106313	SRR6234161, SRR6234162
ATAC-seq	ESC	WT	GSE90895	SRR5077752
ATAC-seq	MEF	WT	GSE90895	SRR5077744
GRO-seq	ESC	WT	GSE27037	SRR097854, SRR097855, SRR097856, SRR097857, SRR097858, SRR097859, SRR097860, SRR097861, SRR097862
GRO-seq	MEF	WT	GSE27037	SRR097863, SRR097864

ATAC-seq	ESC	WT	GSE64825	SRR2919675, SRR2919676, SRR2919677, SRR2919678
ATAC-seq	ESC	BRG1 KD	GSE64825	SRR2919687, SRR2919688, SRR2919689, SRR2919690
ATAC-seq	ESC	CHD4 KD	GSE64825	SRR2919683, SRR2919684, SRR2919685, SRR2919686
Pol II	ESC	WT	GSE64825	SRR2919663, SRR2919664
Pol II	ESC	BRG1 KD	GSE64825	SRR2919669, SRR2919670
Pol II	ESC	CHD4 KD	GSE64825	SRR2919667, SRR2919668
Pol II	ESC	BRG1 WT	GSE98604	SRR5514252, SRR5514253
Pol II	ESC	BRG1 G784E	GSE98604	SRR5514254, SRR5514255
H3K27me3	ESC	BRG1 WT	GSE77093	SRR3111667, SRR3111668
H3K27me3	ESC	BRG1 E861K	GSE77093	SRR3111661, SRR3111662
Pol II	ESC	MBD3 24h	E-MTAB-6804	ftp://ftp.sra.ebi.ac.uk/vol1/fastq/ERR258/007/ERR2588337/ERR2588337.fastq.gz, ftp://ftp.sra.ebi.ac.uk/vol1/fastq/ERR258/008/ERR2588338/ERR2588338.fastq.gz
Pol II	ESC	MBD3 depletion	E-MTAB-6804	ftp://ftp.sra.ebi.ac.uk/vol1/fastq/ERR258/007/ERR2588277/ERR2588277.fastq.gz, ftp://ftp.sra.ebi.ac.uk/vol1/fastq/ERR258/008/ERR2588278/ERR2588278.fastq.gz
H3K27me3	ESC	MBD3 WT	E-MTAB-888	ftp://ftp.sra.ebi.ac.uk/vol1/ERA097/ERA097665/fastq/Mbd3_WT1_H3K27me3_ChIP.fq.gz, ftp://ftp.sra.ebi.ac.uk/vol1/ERA097/ERA097665/fastq/Mbd3_WT2_H3K27me3_ChIP.fq.gz
H3K27me3	ESC	MBD3 null	E-MTAB-888	ftp://ftp.sra.ebi.ac.uk/vol1/ERA097/ERA097665/fastq/Mbd3_null1_H3K27me3_ChIP.fq.gz, ftp://ftp.sra.ebi.ac.uk/vol1/ERA097/ERA097665/fastq/Mbd3_null2_H3K27me3_ChIP.fq.gz
Nascent RNA-seq	ESC	MBD3 24h	E-MTAB-6805	ftp://ftp.sra.ebi.ac.uk/vol1/fastq/ERR258/008/ERR2589528/ERR2589528.fastq.gz, ftp://ftp.sra.ebi.ac.uk/vol1/fastq/ERR258/009/ERR2589529/ERR2589529.fastq.gz
Nascent RNA-seq	ESC	MBD3 depletion	E-MTAB-6805	ftp://ftp.sra.ebi.ac.uk/vol1/fastq/ERR258/002/ERR2589522/ERR2589522.fastq.gz, ftp://ftp.sra.ebi.ac.uk/vol1/fastq/ERR258/003/ERR2589523/ERR2589523.fastq.gz
CapSeq	ESC	BRG1 WT	GSE57170	SRR1265789
CapSeq	ESC	BRG1 KD	GSE57170	SRR1265791
Gene expression	ESC and MEF	WT	GSE90895	ftp://ftp.ncbi.nlm.nih.gov/geo/series/GSE90nnn/GSE90894/suppl/GSE90894%5FRPKM%5FmRNAseq%5Ftable%2Exlsx

Gene expression	ESC	CHD4 WT and KD	GSE64819	GEO2R
Gene expression	ESC	BRG1 WT and KD	GSE27708	GEO2R
Gene expression	ESC	MBD3 WT and KD	GSE31008	GEO2R
Gene expression	ESC	H3.3 WT and KD	E-MTAB-6821	Email correspondence to the authors
Gene expression	ESC	H2A.Z WT and KD	GSE40064	Subramanian et al. (2013) PLoS Genetics
Gene expression	ESC	BRG1 WT and BRM014	GSE158345	ftp://ftp.ncbi.nlm.nih.gov/geo/series/GSE158nnn/GSE158343/suppl/GSE158343%5Ffmigschub%5FRNA%5Fgene%5Fcounts%2Ecsv%2Egz

Supplementary Table S2: Number of patients analyzed for each cancer cohort.

Cancers (SMARCA4)	# of patients (damaging mutation/rest)
Bladder Urothelial Carcinoma	16/394
Brain Lower Grade Glioma	14/490
Breast invasive carcinoma	3/782
Cervical squamous cell carcinoma and endocervical adenocarcinoma	6/280
Head and Neck squamous cell carcinoma	14/483
Kidney renal clear cell carcinoma	8/357
Kidney renal papillary cell carcinoma	10/269
Liver hepatocellular carcinoma	8/333
Lung adenocarcinoma	22/485
Lung squamous cell carcinoma	10/464
Skin Cutaneous Melanoma	25/437
Cancers (CHD4)	# of patients (damaging mutation/rest)
Bladder Urothelial Carcinoma	15/395
Breast invasive carcinoma	18/767
Cervical squamous cell carcinoma and endocervical adenocarcinoma	8/278
Colon adenocarcinoma	13/239
Head and Neck squamous cell carcinoma	6/491
Lung adenocarcinoma	7/500
Lung squamous cell carcinoma	4/470
Skin Cutaneous Melanoma	17/445
Stomach adenocarcinoma	20/390
Uterine Carcinosarcoma	8/49
Uterine Corpus Endometrial Carcinoma	30/142