

## Supplemental Table S1

## List of ChIP-seq experiments performed

	Antibody	Experiment	Replicate	Sequencing	Read Number	Accession Number
B6	PRDM9	ChIPseq	1	PE 100bp	162Mx2	GSM2465574
B6	PRDM9	Input	1	PE 100bp	152Mx2	GSM2465575
B6	PRDM9	ChIPseq	2	PE 100bp	168Mx2	GSM2465576
B6	PRDM9	Input	2	PE 100bp	158Mx2	GSM2465577
RJ2	PRDM9	ChIPseq	1	PE 100bp	94Mx2	GSM2465578
RJ2	PRDM9	Input	1	PE 100bp	115Mx2	GSM2465579
RJ2	PRDM9	ChIPseq	2	PE 100bp	136Mx2	GSM2465580
RJ2	PRDM9	Input	2	PE 100bp	113Mx2	GSM2465581
B6_PRDM9_KO	PRDM9	ChIPseq	1	SE 50bp	186M	GSM2465582
B6_PRDM9_KO	PRDM9	Input	1	SE 50bp	154M	GSM2465583
B6_SPO11_KO	PRDM9	ChIPseq	1	PE 100bp	104Mx2	GSM2465584
B6_SPO11_KO	PRDM9	Input	1	PE 100bp	104Mx2	GSM2465585
B6_SPO11_KO	PRDM9	ChIPseq	2	PE 100bp	117Mx2	GSM2465586
B6_SPO11_KO	PRDM9	Input	2	PE 100bp	97Mx2	GSM2465587
B6	H3K4me3	ChIPseq	1	SE 36bp	44Mx2	GSM2465588
B6	H3K4me3	Input	1	SE 36bp	46Mx2	GSM2465589
RJ2	H3K4me3	ChIPseq	1	SE 36bp	44Mx2	GSM2465590
RJ2	H3K4me3	Input	1	SE 36bp	46Mx2	GSM2465591
B6	DMC1	SSDS	1	PE 50bp	120Mx2	GSM2465592
B6	DMC1	SSDS	2	PE 50bp	142Mx2	GSM2465593
RJ2	DMC1	SSDS	1	PE 50bp	122Mx2	GSM2465594
RJ2	DMC1	SSDS	2	PE 50bp	126Mx2	GSM2465595
B6	H3K36me3	ChIPseq	1	SE 50bp	182M	GSM2465596
B6	H3K36me3	Input	1	SE 50bp	153M	GSM2465597
B6	H3K36me3	ChIPseq	2	SE 50bp	114M	GSM2465598
B6	H3K36me3	Input	2	SE 50bp	173M	GSM2465599
RJ2	H3K36me3	ChIPseq	1	SE 50bp	178M	GSM2465600
RJ2	H3K36me3	Input	1	SE 50bp	152M	GSM2465601
RJ2	H3K36me3	ChIPseq	2	SE 50bp	244M	GSM2465602
B6_SPO11_KO	H3K36me3	ChIPseq	1	SE 50bp	154M	GSM2465603
B6_SPO11_KO	H3K36me3	Input	1	SE 50bp	148M	GSM2465604
B6_SPO11_KO	H3K36me3	ChIPseq	2	SE 50bp	131M	GSM2465605

**Supplemental Table S1** Summary of all ChIP-seq experiments performed, indicating genotype, antibodies, sequencing conditions used, number of mapped reads and accession numbers.