

## Supplementary Material

### **Genome-wide DNA-binding profile of SRY-box transcription factor 3 (SOX3) in mouse testes**

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Table S1. GO term summary and associated gene

Figure S1. Comparison of P7 testes SOX3 ChIP-seq with PLZF and SALL4 SSC ChIP-seq peaks

File S1. Gene symbol definitions

**Table S1. GO term summary and associated gene**

BonfP, Bonferroni P value; FdrQ, False discovery rate Q value; Exp, Expected value; Obs, Observed value; GO, Gene Ontology

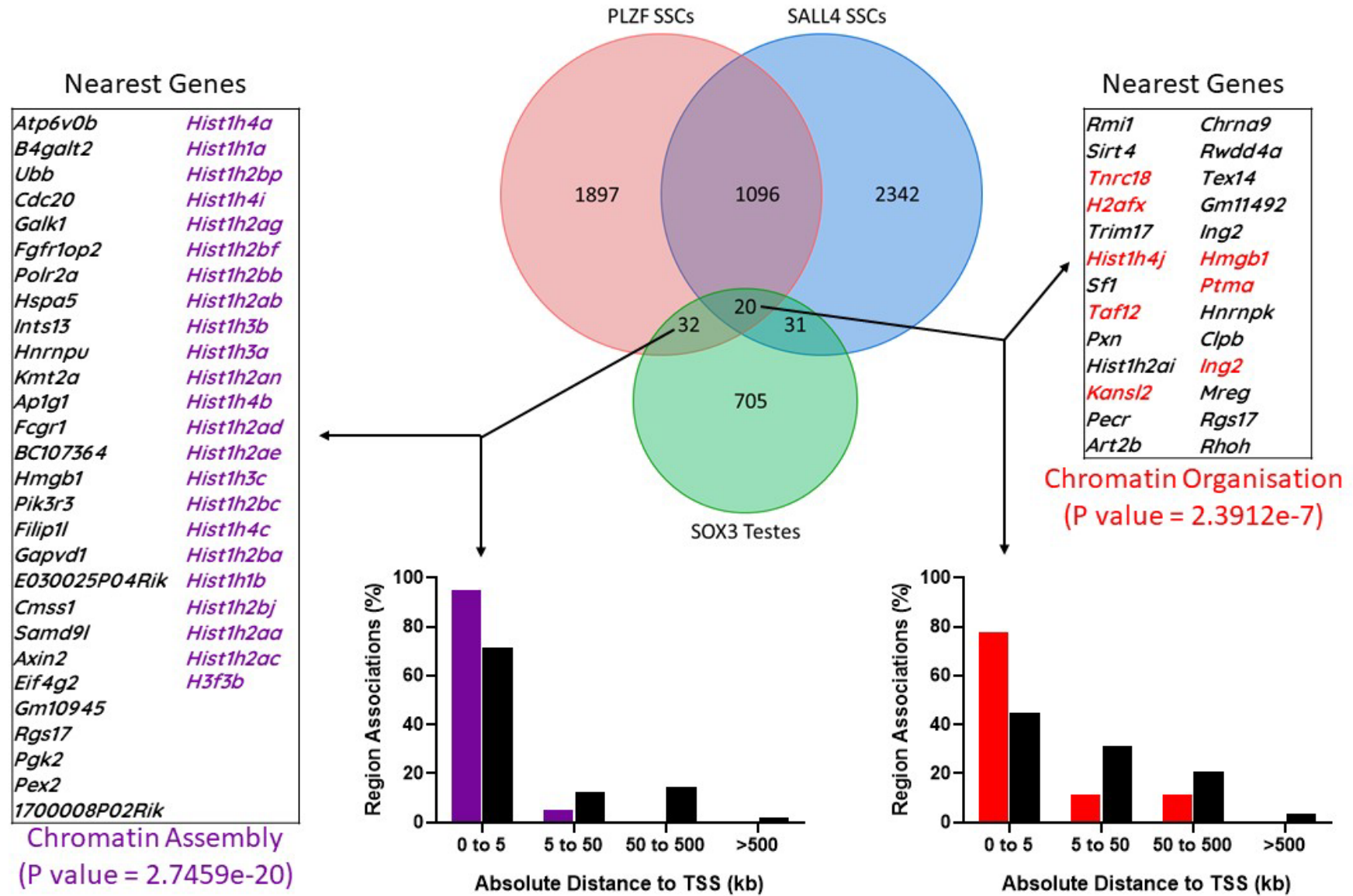
Rank	GO #: Description	Binomial			Regions		Genes		Genes
		P	BonfP	FdrQ	Exp	Obs	Obs	Total	
1	<b>GO:0006335:</b> DNA replication-dependent nucleosome assembly	6.16E-47	7.91E-43	7.91E-43	0.306	29	16	27	<i>Hist1h3a, Hist1h3b, Hist1h3c, Hist1h4a, Hist1h4b, Hist1h4c, Hist1h4f, Hist1h4h, Hist1h4i, Hist1h4j, Hist1h4k, Hist1h4m, Hist1h4n, Hist2h3b, Hist2h3c1, Hist2h3c2</i>
2	<b>GO:0045653:</b> negative regulation of megakaryocyte differentiation	5.10E-41	6.55E-37	3.28E-37	0.107	21	10	15	<i>Hist1h4a, Hist1h4b, Hist1h4c, Hist1h4f, Hist1h4h, Hist1h4i, Hist1h4j, Hist1h4k, Hist1h4m, Hist1h4n</i>
3	<b>GO:0031497:</b> chromatin assembly	2.12E-31	2.72E-27	6.80E-28	5.41	50	44	119	<i>Bahce1, Brd2, H1fx, H2afy, H3f3b, Hist1h1a, Hist1h1b, Hist1h1c, Hist1h1d, Hist1h1e, Hist1h2ba, Hist1h2bb, Hist1h2bc, Hist1h2be, Hist1h2bf, Hist1h2bj, Hist1h2bk, Hist1h2bp, Hist1h2bq, Hist1h2br, Hist1h3a, Hist1h3b, Hist1h3c, Hist1h4a, Hist1h4b, Hist1h4c, Hist1h4f, Hist1h4h, Hist1h4i, Hist1h4j, Hist1h4k, Hist1h4m, Hist1h4n, Hist2h2aa1, Hist2h2aa2, Hist2h2be, Hist2h3b, Hist2h3c1, Hist2h3c2, Hmgb1, Nap113, Smarca5, Tnrc18, Zfp469</i>

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Rank	GO #: Description	Binomial			Regions		Genes		Genes
		P	BonfP	FdrQ	Exp	Obs	Obs	Total	
4	<b>GO:0006333:</b> chromatin assembly or disassembly	5.85E- 30	7.51E- 26	1.50E- 26	6.42	52	46	137	<i>Bahcc1, Brd2, Chd1, H1fx, H2afy, H3f3b, Hist1h1a, Hist1h1b, Hist1h1c, Hist1h1d, Hist1h1e, Hist1h2ba, Hist1h2bb, Hist1h2bc, Hist1h2be, Hist1h2bf, Hist1h2bj, Hist1h2bk, Hist1h2bp, Hist1h2bq, Hist1h2br, Hist1h3a, Hist1h3b, Hist1h3c, Hist1h4a, Hist1h4b, Hist1h4c, Hist1h4f, Hist1h4h, Hist1h4i, Hist1h4j, Hist1h4k, Hist1h4m, Hist1h4n, Hist2h2aa1, Hist2h2aa2, Hist2h2be, Hist2h3b, Hist2h3c1, Hist2h3c2, Hmgb1, Nap113, Smarca5, Suv39h2, Tnrc18, Zfp469</i>
5	<b>GO:0006334:</b> nucleosome assembly	1.56E- 28	2.00E- 24	3.34E- 25	4.56	44	40	101	<i>Brd2, H1fx, H2afy, H3f3b, Hist1h1a, Hist1h1b, Hist1h1c, Hist1h1d, Hist1h1e, Hist1h2ba, Hist1h2bb, Hist1h2bc, Hist1h2be, Hist1h2bf, Hist1h2bj, Hist1h2bk, Hist1h2bp, Hist1h2bq, Hist1h2br, Hist1h3a, Hist1h3b, Hist1h3c, Hist1h4a, Hist1h4b, Hist1h4c, Hist1h4f, Hist1h4h, Hist1h4i, Hist1h4j, Hist1h4k, Hist1h4m, Hist1h4n, Hist2h2aa1, Hist2h2aa2, Hist2h2be, Hist2h3b, Hist2h3c1, Hist2h3c2, Nap113, Smarca5</i>

Figure S1. Comparison of P7 testes SOX3 ChIP-seq with PLZF and SALL4 SSC ChIP-seq peaks

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**Figure S1. Comparison of P7 testes SOX3 ChIP-seq with PLZF and SALL4 SSC ChIP-seq peaks.** Comparison of testes and SSC ChIP-seq datasets for SOX3, PLZF and SALL4 show 20 peaks common to all three datasets. GO analysis of the genes neighbouring the 20 common peaks identified a single enriched GO term, “chromatin organisation”. Almost all histone neighbouring peaks do not overlap with SALL4. GO enrichment identified “chromatin assembly” as the only enriched term for the 32 peaks common to SOX3 and PLZF datasets. The peaks associated with the two GO terms identified were almost exclusively found within 5kb of a transcriptional start site.

## File S1. Gene symbol definitions

<b>Gene symbol</b>	<b>Definition</b>
<i>1700008P02Rik</i>	RIKEN cDNA 1700008P02 gene
<i>AK016178</i>	RIKEN cDNA 4930558J22 gene
<i>Ap1g1</i>	Adaptor protein complex AP-1, gamma 1 subunit
<i>Axin2</i>	Axin 2
<i>BC107364</i>	cDNA sequence BC107364
<i>Cmss1</i>	Cms small ribosomal subunit 1
<i>E030025P04Rik</i>	RIKEN cDNA E030025P04 gene
<i>Fcgr1</i>	Fc receptor, IgG, high affinity I
<i>Fgfr1op2</i>	FGFR1 oncogene partner 2
<i>Filip1l</i>	Filamin A interacting protein 1-like
<i>Gapvd1</i>	GTPase activating protein and VPS9 domains 1
<i>Gm11492</i>	Predicted gene 11492
<i>H3f4</i>	H3.4 histone
<i>Hist1h1a</i>	H1.1 linker histone, cluster member
<i>Hist1h1b</i>	H1.5 linker histone, cluster member
<i>Hist1h1c</i>	H1.2 linker histone, cluster member
<i>Hist1h2aa</i>	H2A clustered histone 1
<i>Hist1h2ab</i>	H2A clustered histone 4
<i>Hist1h2ac</i>	H2A clustered histone 6
<i>Hist1h2ad</i>	H2A clustered histone 7
<i>Hist1h2ae</i>	H2A clustered histone 8
<i>Hist1h2ag</i>	H2A clustered histone 11
<i>Hist1h2ai</i>	H2A clustered histone 13
<i>Hist1h2an</i>	H2A clustered histone 22
<i>Hist1h2ba</i>	H2B clustered histone 1
<i>Hist1h2bb</i>	H2B clustered histone 3
<i>Hist1h2bc</i>	H2B clustered histone 4
<i>Hist1h2bf</i>	H2B clustered histone 7
<i>Hist1h2bj</i>	H2B clustered histone 11
<i>Hist1h2bp</i>	H2B clustered histone 22
<i>Hist1h3a</i>	H3 clustered histone 1
<i>Hist1h3b</i>	H3 clustered histone 2
<i>Hist1h3c</i>	H3 clustered histone 3
<i>Hist1h4a</i>	H4 clustered histone 1
<i>Hist1h4b</i>	H4 clustered histone 2

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<b>Gene symbol</b>	<b>Definition</b>
<i>Hist1h4c</i>	H4 clustered histone 3
<i>Hist1h4i</i>	H4 clustered histone 9
<i>Hist1h4j</i>	H4 clustered histone 11
<i>Hist2h2aa2</i>	H2A clustered histone 19
<i>Hist2h2ab</i>	H2A clustered histone 21
<i>Hist2h2ac</i>	H2A clustered histone 20
<i>Hist2h2bb</i>	H2B clustered histone 18
<i>Hist2h2be</i>	H2B clustered histone 21
<i>Hist2h3b</i>	H3 clustered histone 13
<i>Hist2h3c1</i>	H3 clustered histone 14
<i>Hist2h4</i>	H4 clustered histone 14
<i>Hist3h2a</i>	H2A.W histone
<i>Hist3h2ba</i>	H2B.U histone 2
<i>Hist3h2bb-ps</i>	H2B.U histone 1, pseudogene
<i>Hmgb1</i>	High mobility group box 1
<i>Hnrnpu</i>	Heterogeneous nuclear ribonucleoprotein U
<i>Hspa5</i>	Heat shock protein 5
<i>Ints13</i>	Integrator complex subunit 13
<i>Mreg</i>	Melanoregulin
<i>Pecr</i>	Peroxisomal trans-2-enoyl-CoA reductase
<i>Pex2</i>	Peroxisomal biogenesis factor 2
<i>Pgk2</i>	Phosphoglycerate kinase 2
<i>Pik3r3</i>	Phosphoinositide-3-kinase regulatory subunit 3
<i>Ptma</i>	Prothymosin alpha
<i>Pxn</i>	Paxillin
<i>Samd9l</i>	Sterile alpha motif domain containing 9-like
<i>Sirt4</i>	Sirtuin 4
<i>Taf12</i>	TATA-box binding protein associated factor 12
<i>Tex14</i>	Testis expressed gene 14
<i>Tnrc18</i>	Trinucleotide repeat containing 18
<i>Trim17</i>	Tripartite motif-containing 17