

Supplementary information

Downregulation of LOX promotes castration-resistant prostate cancer progression via IGFBP3

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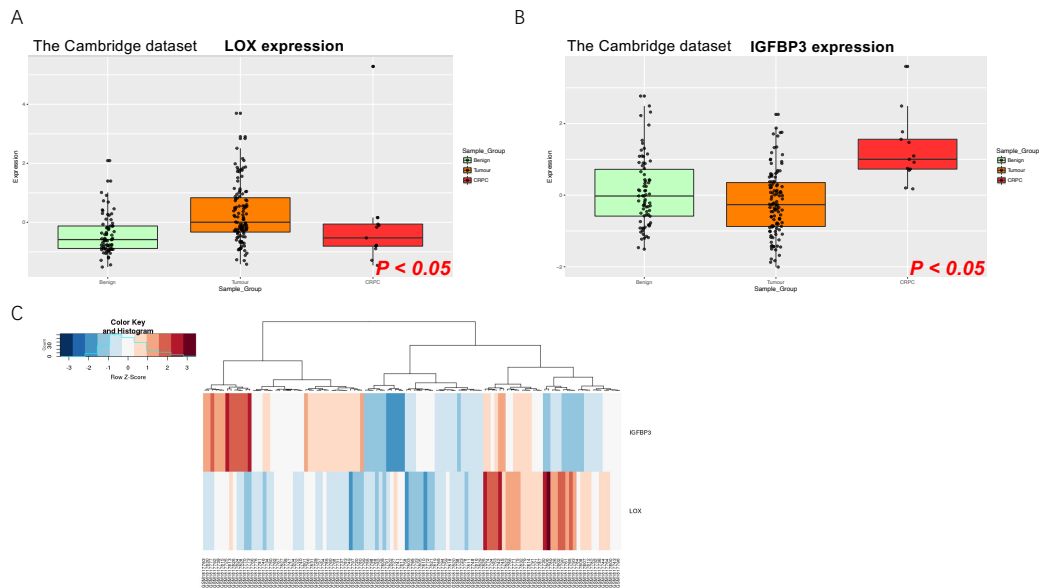
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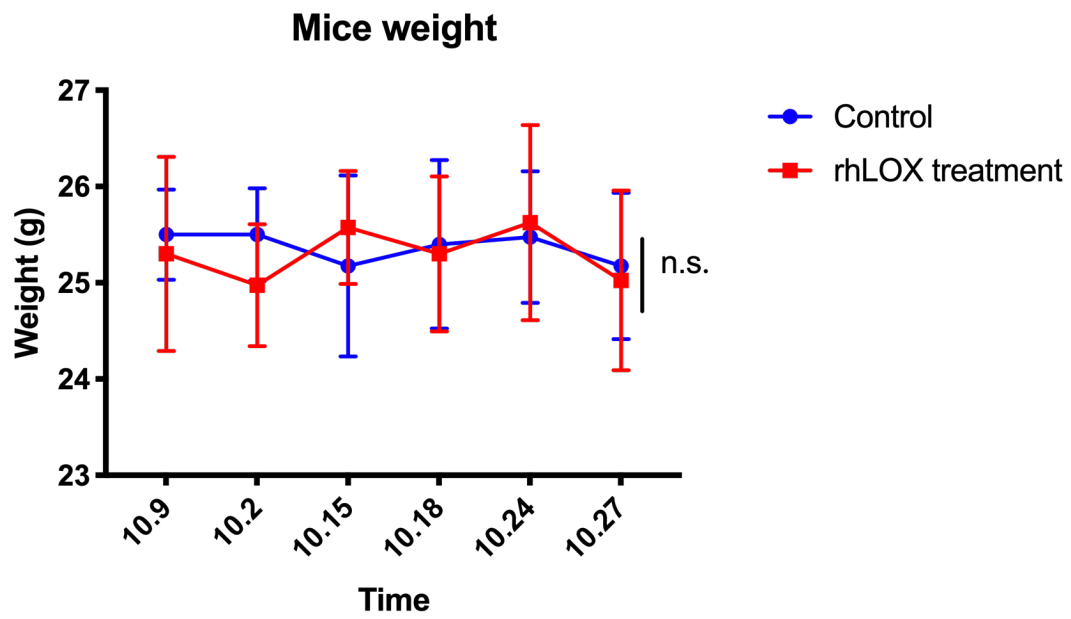
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Supplementary Figures 1-2

Supplementary Tables 1-2



Supplementary Figure 1. Gene expression profiles in the Cambridge dataset.
 (A) The expression of LOX gene in the Cambridge dataset by RNA-seq.
 (B) The expression of IGFBP3 gene in the Cambridge dataset by RNA-seq.
 (C) The heatmap of the selected gene expression profiles. Shades of red and blue represents expression values in z-score form.



Supplementary Figure 2. Changes in body weight during the study period.

Supplementary Table 1. The main characteristics of the CSPC patients (n=31) and CRPC patients (n=18).

Characteristics		CSPC	CRPC
		n	n
Age			
	< 66 years	13	3
	≥ 66 years	18	15
Gleason score			
	<8	16	3
	≥8	15	15
Pathological stage			
	< T3A	24	0
	≥ T3A	7	18

(CRPC: castration-resistant prostate cancer; CSPC: castration-sensitive prostate cancer; PSA: prostate specific antigen)

Supplementary Table 2. All primer and siRNA sequences.

Gene	Usage	Sequence (5'-3')
LOX sense#1	RNAi	GAAUCUGACUAUACCAACATT
LOX antisense#1	RNAi	UGUUGGUUAUAGUCAGAUUCAG
LOX sense#2	RNAi	GCACAGUUGUCAUCAACAUTT
LOX antisense#2	RNAi	AUGUUGAUGACAACUGUGCCA
IGFBP3 sense#1	RNAi	GCAGUGUCGCCCUUCCAAATT
IGFBP3 antisense#1	RNAi	UUUGGAAGGGCGACACUGCTT
IGFBP3 sense#2	RNAi	CAUUCAAAGAUAAUCAUCATT
IGFBP3 antisense#2	RNAi	UGAUGAUUAUCUUUGAAUGGA
GAPDH forward	Q-PCR	GGAGCGAGATCCCTCCAAAAT
GAPDH reverse	Q-PCR	GGCTGTTGTCATACTTCTCATGG
LOX forward	Q-PCR	CGGCGGAGGAAAACCTGTCT
LOX reverse	Q-PCR	TCGGCTGGGTAAGAAATCTGA
IGFBP3 forward	Q-PCR	AGAGCACAGATACCCAGAACT
IGFBP3 reverse	Q-PCR	GGTGATTCAGTGTGTCTTCCATT
GAPDH forward	Q-PCR	GGAGCGAGATCCCTCCAAAAT
Primer1-M forward	MSP	AGTAGATTTAATGGGAGAATAACGG
Primer1-M reverse	MSP	GAATCAACAAAATCGAAATACGAA
Primer1-U forward	MSP	AGTAGATTTAATGGGAGAATAATGG
Primer1-U reverse	MSP	CAAATCAACAAAATCAAATACAAA
Primer2-M forward	MSP	CGAGGAGTTGTTTCGTTTTGTAC
Primer2-M reverse	MSP	AAAATTTTAACTTTCTAACACGTT
Primer2-U forward	MSP	AGGTGAGGAGTTGTTTGTTTGTAT
Primer2-U reverse	MSP	AAAATTTTAACTTTCTAACACATT
Primer3-M forward	MSP	AGTAGATTTAATGGGAGAATAACGG
Primer3-M reverse	MSP	GAATCAACAAAATCGAAATACGAA
Primer3-U forward	MSP	GTAGATTTAATGGGAGAATAATGG
Primer3-U reverse	MSP	CAAATCAACAAAATCAAATACAAA
Primer1-ChIP forward	ChIP	AGACTTCGCCTGCCAACG
Primer1-ChIP reverse	ChIP	CCCTTACCCCTTCCGCTCT
Primer2-ChIP forward	ChIP	ATTTCAACAGCGTTCAGG
Primer2-ChIP reverse	ChIP	TTCGGTGACCAACAGAGG
Primer3-ChIP forward	ChIP	TACCCAAGACAAGAAGAACA
Primer3-ChIP reverse	ChIP	ACACCGCAAGTCTCCAAT
Primer4-ChIP forward	ChIP	GGAACGGATGTAAACCTG
Primer4-ChIP reverse	ChIP	ATAATCGTCGCTTGCTGT

(RNAi: RNA interference; Q-PCR: quantitative real-time PCR; MSP: methylation specific PCR; ChIP: chromatin immunoprecipitation)