

Article

Partial Hepatectomy Promotes the Development of KRASG12V-induced Hepatocellular Carcinoma in Zebrafish

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Table S1. List of primers used in RT-qPCR.

Genes	Forward	Reverse
<i>acta2</i>	TGATGAAGCCGGACCCCTCTA	AGAAGTGGGCAGTGCAAAGA
<i>ccnb1</i>	GGTGACTGGACCCCTACTCT	CCTCGTTGACCCTCACAACA
<i>cdk1</i>	CTCTGGGGACCCCTAACAAAT	CGGATGTGTCATTGCTTGTC
<i>col1a1b</i>	TGAAATGAGGCGGCCAAAC	TCCAGCATCCAGTTGACCAC
<i>cybb</i>	CCGGAGACTCAGGCTTTTGA	GTGATAGGATCGTCCTCCGC
<i>fgf13b</i>	AGAGTGGCATGGCGTTTCC	ATAGCCACCACTCGTAGCCC
<i>hif1aa</i>	GATGCTCGTCCACAGAAC	CACGTCCGAGACTTGATA
<i>kras</i> ^{G12V}	CGACCACTACCAGCAGAACA	GCTTTTGCCTACGCCTACAG
<i>lama5</i>	CCACGGCCAAAGAAGAATGC	GCGTCACACCTACACTGACA
<i>rps18</i>	ATACAGCCAGGTCCTTGCTAATG	GTGACGGAGACCACGGTGAG
<i>s100a1</i>	CCTAATTCCCCACACAGGT	TTATCCACCAGACGAGGAGCG
<i>tgfb1b</i>	ATAGCAGGTTTGTCCCGCAA	ATAGGAGCAAGAGCCAGTGC

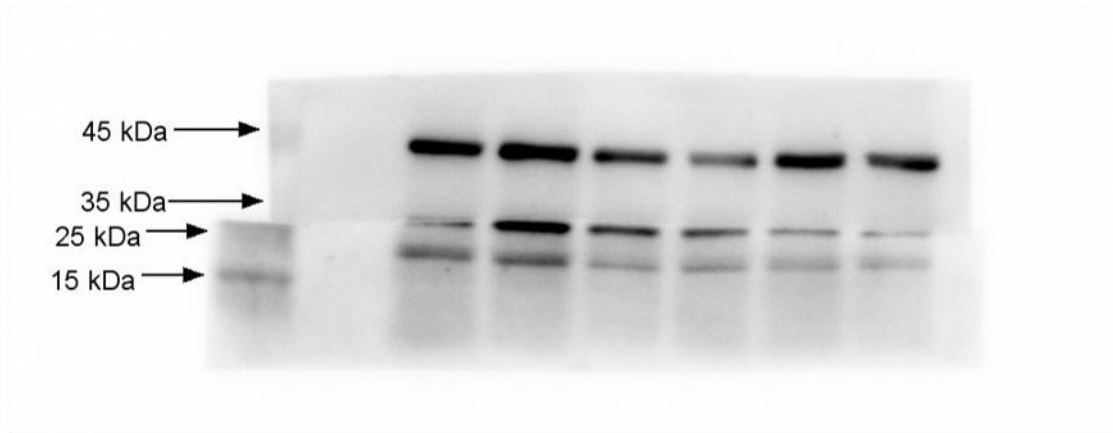
Table S2. Genes up/downregulated in both *kras*⁺ livers and PH livers.

Genes Upregulated	PH vs Sham on Day 1		<i>kras</i> ⁺ vs WT on Day 5	
Gene ID	log2FoldChange	padj	log2FoldChange	padj
<i>fgf13b</i>	5.794282	9.44E-15	4.651961	0.010768
<i>serpinb1</i>	2.556894	3.63E-07	4.677396	1.54E-30
<i>LO018309.1</i>	4.527712	0.00096065	2.839932	2.65E-05
<i>asns</i>	2.458471	0.00152875	1.079289	0.001419
<i>BX571955.2</i>	9.060113	0.00186814	11.93705	1.82E-10
<i>ntd5</i>	2.724144	0.00189110	6.869992	3.36E-34
<i>s100a1</i>	6.020058	0.00198862	3.340291	0.021678
<i>ppp1r15b</i>	4.322528	0.00486106	4.970812	8.99E-13
<i>abcc6b.2</i>	1.881603	0.00536820	1.434609	0.017899
<i>osr1</i>	8.69703	0.00781708	3.384821	0.045604
<i>chst6</i>	8.654082	0.00974658	4.171725	0.001213
<i>si:ch211-286b4.4</i>	2.234783	0.00974658	3.26067	0.0053
<i>hpcal4</i>	8.493526	0.01597101	6.463062	2.63E-14
<i>cers2b</i>	2.22468	0.02296315	1.466948	0.007234
<i>stard10</i>	1.711465	0.03280682	6.676752	1.32E-28
<i>hmg13</i>	1.430703	0.0356808	1.576506	0.01595
Genes Downregulated	PH vs Sham on Day 1		<i>kras</i> ⁺ vs WT on Day 5	
Gene ID	log2FoldChange	padj	log2FoldChange	padj
<i>ceip</i>	-2.67926	4.03E-10	-3.28211	1.44E-11
<i>cyp7a1</i>	-3.36883	6.15E-10	-3.49177	0.02243
<i>si:ch211-22d5.2</i>	-6.67583	6.98E-09	-5.37469	0.008775

CU468730.1	7.678782	7.20E-05	si:ch211-22d5.2	-6.67583	6.98E-09
tnnt3b	9.90009	0.00019	armc2	-10.907	4.62E-08
BX511067.1	24.48908	0.000226	si:dkeyp-73d8.9	-29.4535	1.29E-06
sst1.2	3.284441	0.000226	CU464134.1	-3.2615	4.00E-06
si:ch211-270n8.1	2.023279	0.000298	gnai2b	-2.4356	6.06E-06
atp2a1l	9.524161	0.000336	zgc:152753	-2.40664	9.01E-06
cxcl8b.3	2.276303	0.001025	pde5aa	-10.5767	9.75E-06
fbkp2	1.939463	0.001187	CR318601.1	-3.59715	3.19E-05
cnpv1	2.085854	0.00141	mhc2b	-2.07675	8.34E-05
BX322792.1	9.088049	0.00182	CU326366.2	-9.97757	0.000226
mvda	3.679515	0.00182	prkd4	-3.55058	0.000311
si:dkeyp-107f9.2	8.989167	0.002371	cd74a	-2.24291	0.000394
si:dkey-228a15.1	1.927204	0.00255	si:ch211-250k18.7	-2.26293	0.00055
dbi	1.962446	0.00271	pla2g4ab	-9.32298	0.000582
wu:fd46c06	1.722508	0.00271	pcdh1g18	-22.8478	0.000984
si:dkey-105h12.2	1.847736	0.002782	zgc:103700	-1.98876	0.001025
hp	3.724809	0.003252	CT867973.2	-22.755	0.001025
anxa2a	1.570429	0.004061	itgb5	-2.252	0.001109
crp2	2.253436	0.004189	si:ch211-181d7.1	-4.0402	0.001669
CU570782.1	8.821518	0.005287	cdc42bpab	-3.25991	0.002118
sox4b	1.820116	0.00579	cyp27b1	-2.70079	0.002254
agr2	2.5585	0.005827	ccl36.1	-2.13146	0.00255
hmgcs1	3.479807	0.006045	rec8b	-8.91938	0.00255
npsn	2.313444	0.006045	ctss2.2	-2.5844	0.002582
hbl2	4.208621	0.007161	mhc2a	-3.50821	0.003349
AL845362.1	9.060736	0.007182	si:dkey-11f4.20	-3.0613	0.003398
acbd7	2.115806	0.007461	anxa3b	-1.6439	0.003466
ppib	1.51518	0.007848	fblim1	-2.14767	0.00353
si:ch211-214j24.15	3.114974	0.008314	c1galt1a	-8.80267	0.003906
sb:cb37	1.539925	0.008669	fat2	-5.45327	0.0043
krtcap2	1.515832	0.008884	si:ch211-79k12.1	-1.58443	0.00433
stk40	2.112158	0.009152	thbs4b	-3.35822	0.00453
acat2	2.200173	0.009556	CU855930.2	-8.78554	0.00453
CR626907.3	1.408087	0.009747	cd74b	-1.94742	0.005193
pvalb3	3.629958	0.010253	cdo1	-1.81995	0.00558
CABZ01061592.1	4.083059	0.010342	si:dkey-9c18.3	-9.41301	0.00558
postnb	2.102819	0.013176	slc27a2a	-1.73248	0.005627
si:zf0s-1897c11.1	8.932785	0.014391	CR753876.1	-1.61026	0.006045
nrg2b	8.527183	0.014708	si:ch211-217k17.11	-1.97659	0.006906
alg5	1.563213	0.016356	krt18a.2	-2.00589	0.00704
mdkb	1.790627	0.016656	zgc:194101	-3.23023	0.007161
rpn1	1.363031	0.016656	ctsbb	-8.7534	0.007182
cyp3c4	2.158782	0.019001	rrp1	-1.89528	0.008669
zgc:123103	2.447353	0.019158	cyp2k6	-2.93425	0.00941
ost4	1.472512	0.022551	si:busm1-194e12.11	-2.14172	0.009726
cars1	1.830103	0.022933	si:dkey-27d5.3	-8.60835	0.0099
ebp	3.467681	0.022963	blk	-3.49857	0.012364

<i>BX323564.1</i>	3.226513	0.026413	<i>cxcl11.6</i>	-4.55238	0.012364
<i>myhz1.1</i>	5.348327	0.027891	<i>FP236331.1</i>	-2.44879	0.015941
<i>slc1a4</i>	4.021798	0.031494	<i>BX323596.2</i>	-3.52788	0.016751
<i>CU469577.1</i>	1.725836	0.031691	<i>CABZ01111959.1</i>	-8.46499	0.019001
<i>si:dkey-183n20.15</i>	1.867609	0.034457	<i>CABZ01073795.1</i>	-3.10266	0.019158
<i>slc43a3b</i>	1.866646	0.034457	<i>slc8a4b</i>	-5.56656	0.019158
<i>si:ch211-212c13.8</i>	1.564293	0.035681	<i>cacna1aa</i>	-8.59395	0.023104
<i>lyve1a</i>	2.403602	0.038219	<i>cyp2r1</i>	-1.65699	0.024871
<i>rnd2</i>	2.608239	0.04061	<i>plekhg6</i>	-8.32129	0.0309
<i>CABZ01079192.1</i>	2.004205	0.04061	<i>zfp36l1b</i>	-1.56347	0.032139
<i>tmem263</i>	1.370816	0.04061	<i>ptk2ab</i>	-1.61247	0.032807
<i>chia.6</i>	1.425481	0.041387	<i>loxl4</i>	-2.12842	0.034457
<i>plppr5a</i>	8.226123	0.045582	<i>irflb</i>	-2.56474	0.035471
<i>sinhcaf</i>	1.424048	0.046413	<i>proca</i>	-1.26949	0.035681
<i>nkx6.3</i>	2.218194	0.047059	<i>epob</i>	-4.67739	0.035681
<i>si:ch73-44m9.5</i>	2.639637	0.049447	<i>zgc:194246</i>	-8.63239	0.035901
			<i>dock11</i>	-2.07097	0.04061
			<i>si:dkey-28k24.2</i>	-2.61835	0.04061
			<i>cxcl11.6</i>	-4.53957	0.045487
			<i>tnikb</i>	-1.71311	0.046006
			<i>tspan2a</i>	-3.72472	0.046381
			<i>nitr12</i>	-8.15367	0.046396
			<i>zgc:152658</i>	-8.1592	0.04689
			<i>dus3l</i>	-1.47694	0.04827
			<i>zgc:174354</i>	-8.20838	0.048961

A



B

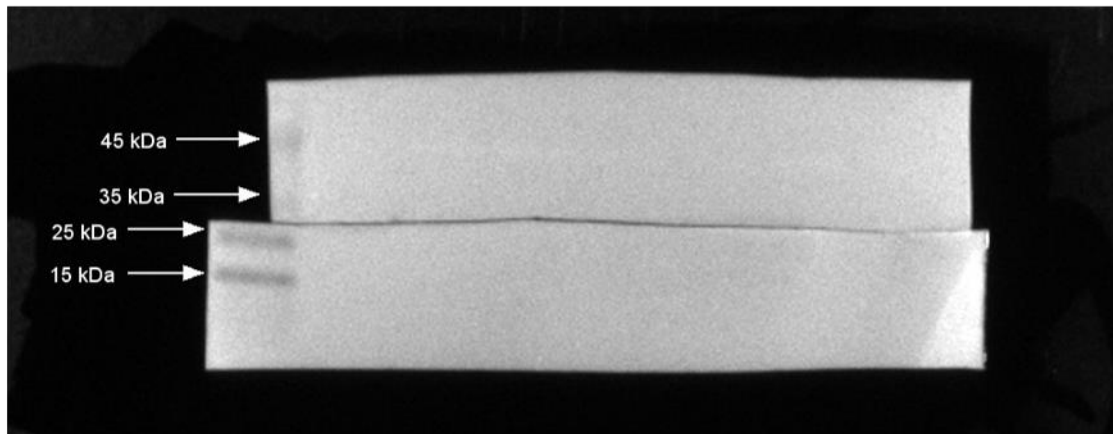


Figure S1. Uncropped images of S100A1 blots. (A) The image of the membrane of S100A1 blots under UV light. The membrane was cut into two strips. The upper strip was stained with the anti-β-actin antibody, while the lower strip was stained with the anti-S100A1 antibody. **(B)** The image of the membrane in **(A)** under white light.