

Table S1. Average intensity data obtained by imaging analysis.

Sample	FAK	pFAK	nFAK	EZH2	H3K27me3	PCNA
<i>CTRL01</i>	25410256	20025645	1778717	205636958	25456965	28565856
<i>CTRL02</i>	23124585	21548563	1387475	215685968	23654585	31256369
<i>CTRL03</i>	20145236	18457896	604357	258696547	28450325	30256585
<i>CTRL04</i>	28414236	26145632	1136569	186596586	27451263	29565485
<i>CTRL05</i>	24102563	22154763	2892307	210363526	22145263	33256585
<i>CTRL06</i>	21365485	16554103	1068274	201452639	21056365	27523654
<i>CTRL07</i>	26456369	24789632	2645636	195847215	26365690	29526545
<i>CTRL08</i>	27458630	23568412	2745863	235263658	24521457	30256365
<i>NC-HCC01</i>	327053800	285645897	65410760	366365785	276052456	285265155
<i>NC-HCC02</i>	382809076	355654253	95702269	284574536	354120365	374589633
<i>NC-HCC03</i>	447081442	401562496	134124432	250653636	352541563	394524556
<i>NC-HCC04</i>	183706416	165620145	64297245	303696985	293562545	320545632
<i>NC-HCC05</i>	372203056	324514865	119104977	296585663	284136523	304512563
<i>NC-HCC06</i>	385645852	352015632	146545423	325636586	382545658	302565635
<i>C-HCC01</i>	706632560	675456587	296785675.2	398748596	284596325	301457855
<i>C-HCC02</i>	391025653	344565810	152500004.7	312565847	335415258	295654788
<i>C-HCC03</i>	522042485	463012530	224478268	370265888	374563254	401547853
<i>C-HCC04</i>	635458632	584015230	311374729	384574896	285463651	314521455
<i>C-HCC05</i>	676433921	625463564	324688282	397896545	284575963	301452654
<i>C-HCC06</i>	805264780	714236520	402632390	405936856	332565452	354155236
<i>C-HCC07</i>	554585630	476541254	249563533	312563674	295451563	321025455
<i>C-HCC08</i>	765489990	713015826	359780295	325614755	314587896	374578452
<i>C-HCC09</i>	331134418	254869457	152321832	342563651	354156365	374512447
<i>C-HCC10</i>	405663254	331042519	198774994	302563685	345265558	295451632
<i>C-HCC11</i>	412563521	364865987	181527949	312563658	321245874	285456521

Table S2. MLPA analysis on pediatric HCCs.

	8p		8q	
			<i>PTK2</i>	
NC-HCC01	1	1	1	1
NC-HCC02	1	1	1	1
NC-HCC03	1	1	1	1
NC-HCC04	1	1	1	1
NC-HCC05	1	1	1	1
NC-HCC06	-	-	-	-
C-HCC01	-	-	-	-
C-HCC02	0.5	2	1.5	2.5
C-HCC03	0.5	1.5	1.5	2
C-HCC04	1	1	1	1
C-HCC05	1	1	1	1
C-HCC06	1	1	1	1
C-HCC07	0.5	1.5	1	1.5
C-HCC08	1	1	1	1
C-HCC09	1	1	1	1
C-HCC10	1	1	1	1
C-HCC11	-	-	-	-

Table S3. Correlations of the protein expression: Spearman rank correlation tests.

		FAK	pFAK	nFAK	EZH2	H3K27me3	PCNA
FAK	<i>Correlation Coefficient</i>	1	0.987	0.962	0.786	0.708	0.634
	<i>P value</i>	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0006
pFAK	<i>Correlation Coefficient</i>	0.987	1	0.940	0.787	0.741	0.636
	<i>P value</i>	<0.0001		<0.0001	<0.0001	<0.0001	0.0006
nFAK	<i>Correlation Coefficient</i>	0.962	0.940	1	0.843	0.687	0.617
	<i>P value</i>	<0.0001	<0.0001		<0.0001	0.0001	0.0010
EZH2	<i>Correlation Coefficient</i>	0.786	0.787	0.843	1	0.619	0.578
	<i>P value</i>	<0.0001	<0.0001	<0.0001		0.0009	0.0024
H3K27me3	<i>Correlation Coefficient</i>	0.708	0.741	0.687	0.619	1	0.803
	<i>P value</i>	<0.0001	<0.0001	0.0001	0.0009		<0.0001
PCNA	<i>Correlation Coefficient</i>	0.634	0.636	0.617	0.578	0.803	1
	<i>P value</i>	0.0006	0.0006	0.0010	0.0024	<0.0001	

Table S4. Available clinics of samples.

Sample	Medical History	Age	Sex	Tumor size (radiologic)	Metastasis	Therapy	Surgery	Outcome
NC-HCC01	No Cirrhosis	8y	M	multinodular, max 3 cm	NEG	PLADO + Bevacizumab	LT	alive
NC-HCC02	No Cirrhosis	10y	M	9 cm	NEG	PLADO + Bevacizumab	LT	alive
NC-HCC03	No Cirrhosis	16y	F	multinodular, max 3.5 cm	POS (lung)	PLADO + Bevacizumab	-	dead
NC-HCC04	No Cirrhosis	6y	M	multinodular, max 7 cm	NEG	PLADO	RH	alive
NC-HCC05	No Cirrhosis	9y	M	10 cm	NEG	PLADO + Bevacizumab	LT	alive
NC-HCC06	No Cirrhosis	3y	M	6 cm	POS	PLADO + Bevacizumab	RH	alive
C-HCC01	PFIC2	2y	F	1.5 cm	NEG	-	LT	NA
C-HCC02	Tyrosinemia	8y	M	1.5 cm	NEG	-	LT	alive
C-HCC03	Tyrosinemia	10y	F	3 cm	NEG	-	LT	alive
C-HCC04	Tyrosinemia	11y	M	1.2 cm	NEG	-	LT	alive
C-HCC05	Tyrosinemia	5y	M	2.4 cm	NEG	-	LT	alive
C-HCC06	Metabolic Cirrhosis	9y	F	1.4 cm	NEG	-	LT	alive
C-HCC07	HBV	10y	M	1.5 cm	NEG	-	LT	alive
C-HCC08	Cardiac Cirrhosis	25y	F	8 cm	NEG	-	-	dead
C-HCC09	Cardiac Cirrhosis	33y	F	4.5 cm	NEG	-	RH	alive
C-HCC10	Neonatal Hemochromatosis	1mo	F	2.3 cm	NEG	-	LT	dead
C-HCC11	Biliary Atresia	10mo	M	1.3 cm	NEG	-	LT	alive

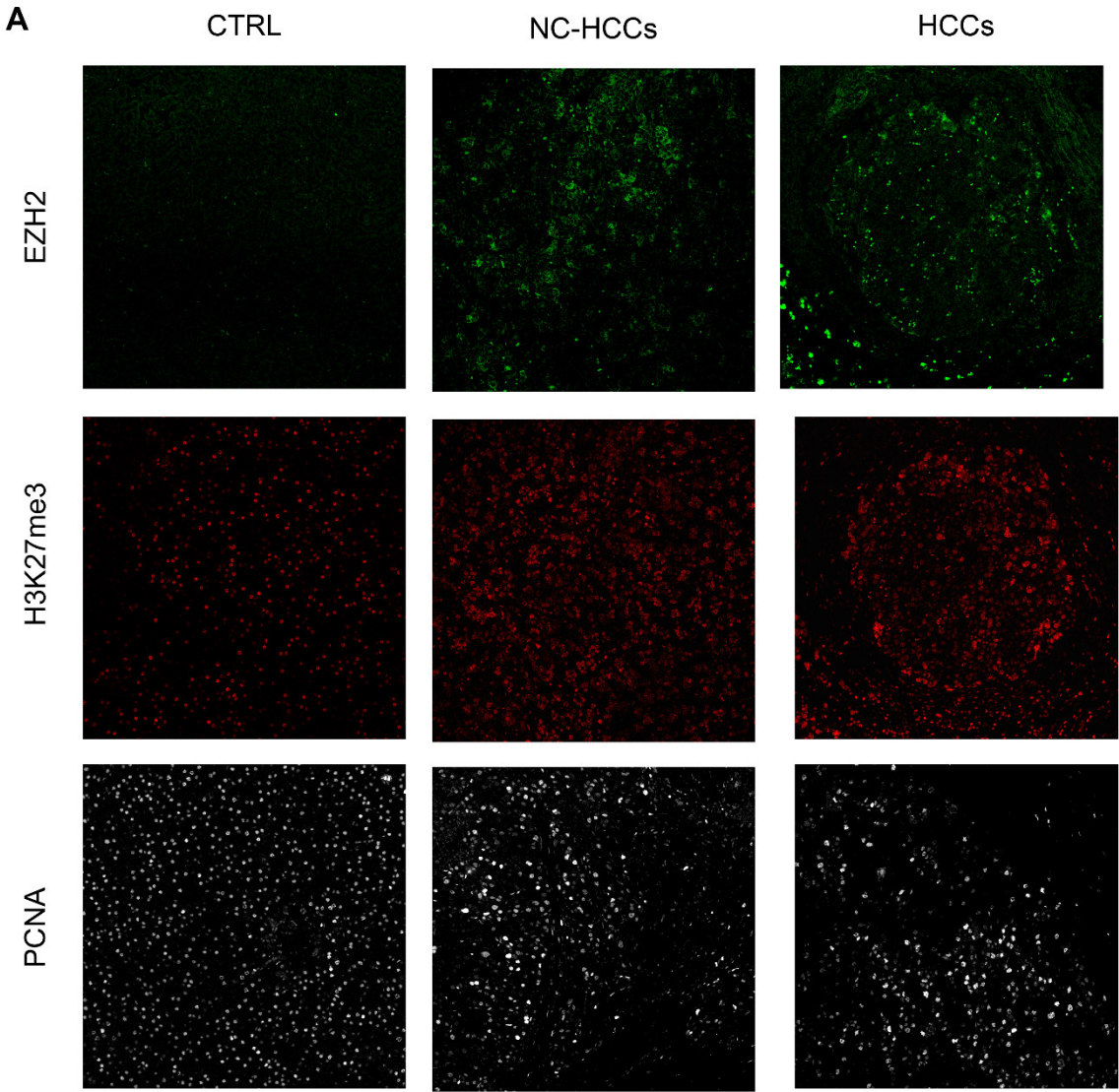
HBV, hepatitis B virus; LT, liver transplantation; mo, months; PLADO, cisplatin/doxorubicin; RH, Right hepatectomy; y, years

Table S5. Data on histochemical scores for the immunohistochemical staining in pediatric HCCs.

Sample	nβ-Cat	GPC3	GS	β-Cat Mutation
<i>CTRL01</i>	-	-	_*	NA
<i>CTRL02</i>	-	-	_*	NA
<i>CTRL03</i>	-	-	_*	NA
<i>CTRL04</i>	-	-	_*	NA
<i>CTRL05</i>	-	-	_*	NA
<i>CTRL06</i>	-	-	_*	NA
<i>CTRL07</i>	-	-	_*	NA
<i>CTRL08</i>	-	-	_*	NA
<i>NC-HCC01</i>	-	++	++	NA
<i>NC-HCC02</i>	++	-	+++	-
<i>NC-HCC03</i>	+	-	+++	-
<i>NC-HCC04</i>	+	-	-	-
<i>NC-HCC05</i>	-	+	+++	-
<i>NC-HCC06</i>	+++	+++	+++	NA
<i>C-HCC01</i>	-	+	++	NA
<i>C-HCC02</i>	-	+++	+++	-
<i>C-HCC03</i>	-	++	+++	-
<i>C-HCC04</i>	-	-	+++	-
<i>C-HCC05</i>	-	+	+++	-
<i>C-HCC06</i>	-	-	++	-
<i>C-HCC07</i>	-	+/-	+/-	NA
<i>C-HCC08</i>	-	++	+	NA
<i>C-HCC09</i>	-	-	+	-
<i>C-HCC10</i>	-	+	+++	NA
<i>C-HCC11</i>	-	+/-	+++	NA

*Only perivascular positivity.

Supplementary Figure 1. Representative imaging of immunofluorescence for EZH2, H3K27me3 and PCNA.



Supplementary Figure 2. Representative imaging of immunohistochemical staining for hematoxylin and eosin (H&E), β -Catenin and GPC3 and GS.

