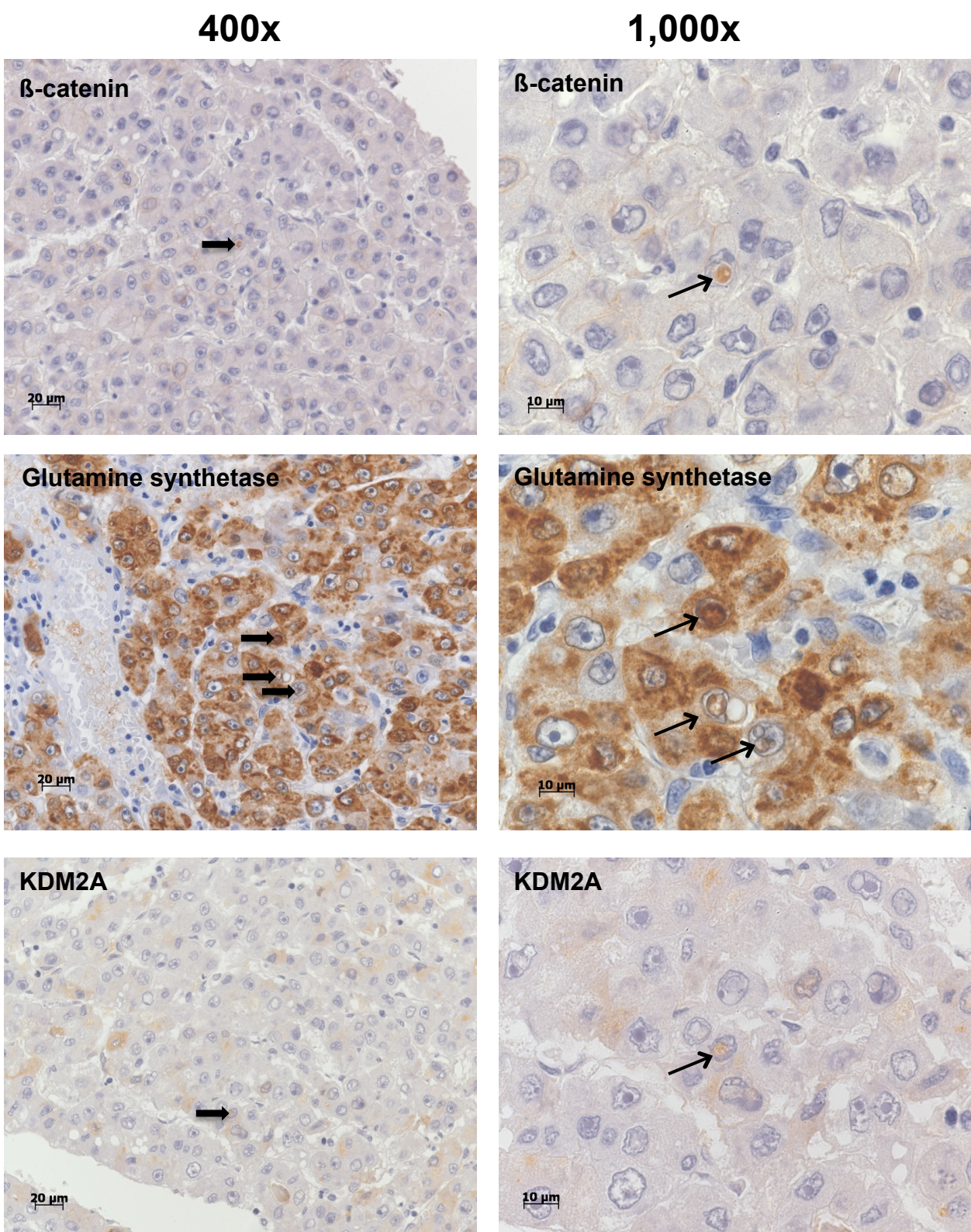


Supplementary material, Figure 1



Supplementary Figure 1. The images show series tissue sections for β-catenin, glutamine synthetase and KDM2A IHC staining in a representative patient from the HCC cohort. Intranuclear inclusions containing accumulations of β-catenin, glutamine synthetase and KDM2A are marked (arrows). Original magnifications: 400 X (left) and 1,000 X (right).

Supplementary table 1

Antibodies and staining protocols

Antibody	Company	Clonality	Clone	HIER	Dilution	Incubation	Second. Antibody	Company	Dilution	Incubation	Detection	Company	Incubation	DAB	Hematoxylin
Ubiquitin	Agilent Technologies	Rb. poly.		pH 9.0; 20 min. WB 98°C	/1000	30min. RT	-	-	-	-	Zytomed polymer HRP	Zytomed	Kit	2x5min.	5min.
p62	Santa Cruz	Ms. mono.	D-3	pH 9.0; 20 min. WB 98°C	/1000	30min. RT	-	-	-	-	Zytomed polymer HRP	Zytomed	Kit	2x5min.	5min.
BetaCatenin	Transduction	Ms. mono.	14	pH 9.0; 20 min. WB 98°C	/1000	30min. RT	-	-	-	-	Zytomed polymer HRP	Zytomed	Kit	2x5min.	5min.
KDM2A	Novus	Rb. poly.		pH 9.0; 20 min. WB 98°C	/400	30min. RT	-	-	-	-	Zytomed polymer HRP	Zytomed	Kit	2x5min.	5min.
Glutamin Synthetase	Millipore	Ms mono.	GS-6	pH 9.0; 20 min. WB 98°C	/3000	30min. RT					Zytomed polymer HRP	Zytomed	Kit	2x5min.	5min.

Antibodies and staining protocols are shown in detail. From each FFPE tissue 3-to-5 µm-thick sections were cut, dewaxed and pre-treated for further processing in an automated staining device (Dako Autostainer, Dako Glostrup Denmark). Abbreviations: Rb: rabbit; Ms: mouse; Gt: goat; poly: polyclonal; mono: monoclonal

Supplementary Table 2

Double labeling immunofluorescence microscopy

A: Primary Antibodies

anti-	manufacturer	order number	host	dilution	Incubation conditions
p62	Enzo	BML PW 9860	Rabbit polyclonal	1:1000	room temperature, 60min
BetaCatenin	Transduction	C19220	Mono Mouse IgG1	1:25	room temperature, 60min 2x

B: Fluorochrome labeling

p62	Donkey Anti Rabbit AF555	Invitrogen
BetaCatenin	Goat Anti Mouse HRP Goat Anti HRP AF488	Cell Signaling 2x Dianova 2x