

## S1 Table. Detailed information for selected reagents

### (A) MISSION shRNA constructs (Sigma-Aldrich) used for gene knockdown

Target Gene	TRC Number	Product Details	
<b>SENP3</b>	TRCN0000004109	<b>Region:</b> CDS <b>Sequence:</b> CCGGCCTCGCTGACATTCCACTGGACTCGAGTCCAGTGG AATGTCAGCGAGGTTTTT	<b>TRC Version:</b> 1
<b>IQGAP2</b>	TRCN0000414490	<b>Region:</b> CDS <b>Sequence:</b> CCGGACTAGAGGTTGCACGATTAAGCTCGAGCTTAATCGT GCAACCTCTAGTTTTTTT	<b>TRC Version:</b> 2

### (B) Primary antibodies used for immunoblotting and immunofluorescence staining

Target Protein	Antibody	Vendor
<b>SENP3</b>	SENP3 (D20A10) Rabbit mAb	Cell Signaling Technology
<b>Actin</b>	$\beta$ -Actin (13E5) Rabbit mAb	Cell Signaling Technology
<b>P-Akt</b>	Phospho-Akt Ser473 (D9E) XP <sup>®</sup> Rabbit mAb	Cell Signaling Technology
<b>Akt</b>	Akt (pan) (C67E7) Rabbit mAb	Cell Signaling Technology
<b>IQGAP2</b>	IQGAP2 (D1X8U) Rabbit mAb	Cell Signaling Technology
<b>Ubiquitin</b>	Ubiquitin (P4D1) Mouse mAb	Cell Signaling Technology
<b>P-S6</b>	Phospho-S6 Ribosomal Protein (Ser235/236) (D57.2.2E) Rabbit mAb	Cell Signaling Technology
<b>S6</b>	S6 Ribosomal Protein (5G10) Rabbit mAb	Cell Signaling Technology
<b>Puromycin</b>	Anti-puromycin antibody clone 12D10	Sigma-Aldrich
<b>Sumo 2/3</b>	Anti-Sumo 2+3 antibody [8A2]	Abcam
<b>HBx</b>	Anti-Hepatitis B Virus X antigen antibody [3F6-G10]	Abcam
<b>HBc</b>	Anti-Hepatitis B Virus Core Antigen antibody [14E11]	Abcam
<b>HBsAg</b>	Anti-Hepatitis B Virus Surface Antigen (Ad/Ay) antibody (ab9193)	Abcam

### (C) Primers used for RT-qPCR

Target Gene	Forward (5' to 3')	Reverse (5' to 3')
<b>SENP3</b>	ACAGAACTGGCTCAATGACC	TCCACCTTTTCACCCCATC
<b>IQGAP2</b>	CCCTTGATCTACTGCCTTATGG	GGCTGGATTCATGTACCGATAG
<b>HBV-PC</b>	GGTCTGCGCACCAGCACC	GAACCTTAGGCCCATATTAGTG
<b>HBV-X</b>	CGTCTGTGCCTTCTCATCTG	ACATTGCTGAGAGTCCAAGAG
<b>Beta-actin</b>	CGCGAGAAGATGACCCAGAT	ACAGCCTGGATAGCAACGTACAT