## **SUPPLEMENTARY TABLES**

## Supplementary Table 1. Primers for PCR.

Type	Gene	Forward primer 5' - 3'	Reverse primer 5' - 3'	Amplicon
mRNA	HPRT	GGACAGGACTGAAAGACTTG	TAATCCAGCAGGTCAGCAAA	114 bps
mRNA	p21	GCAAGAGAAAACCCTGAAGTG	CACACAGAGTGAGGGCTAAG	100 bps
mRNA	SESN1	CCATAGGCCTTGGCTGATTA	TCCACACTGTGATTGCCATT	246 bps
mRNA	MDM2 X1	TGCAAGCACCTCACAGATTC	ACACAATGTGCTGCTTC	188 bps
	$MDM2\ X1+X2$	ATGAATCCTCCCTTCCATC	CTGTCAGCTTTTTGCCATCA	169 bps
DNA	APP	AGGACTGACCACTCGACCAG	CGGGGGTCTAGTTCTGCAT	377 bps
DNA	PST	AATAGAGAACGGCAGGAGCA	GCCATGAGGGCACTAATCAT	608 bps
DNA	Internal control	CTAGGCCACAGAATTGAAAGATCT	GTAGGTGGAAATTCTAGCATCATCC	324 bps

Two pairs of primers were designed for MDM2. One (MDM2 X1) only covers transcript variant 1 (NM\_010786.4) and the other (MDM2 X1+X2) covers both known variants (NM\_001288586.2 as well as NM\_010786.4). Amplicon lengths for each marker were verified using an Agilent Bioanalyzer 2100 and Agilent DNA 1000 Kit. Primers for both transgenes (APP and PST) and internal controls were designed and their sequences were provided by the Jackson Laboratory.

## **Supplementary Table 2. Primary antibodies.**

Antigen	Species	Company	Catalog no.	Dilution	Application
p16	Mouse	Santa Cruz Biotechnology	sc-1661	1:100	IF
H2AX	Rabbit	Cell Signaling	#9718	1:400	IF
MDM2	Mouse	Abcam	ab16895	1:200	IF
p53	Rabbit	Santa Cruz Biotechnology	Sc-6243	1:100	IF
RPS6	Rabbit	Cell Signaling	#2217	1:100	IF
RPL5	Rabbit	Cell Signaling	#14568	1:100	IF

## Supplementary Table 3. Secondary antibodies.

Host	Recognizes	Fluorophore	Company	Catalog no.	Dilution	Application
Goat	Mouse IgG	Alexa Fluor 488	ThermoFisher	A-1101	1:1000	IF
Goat	Rabbit IgG	Alexa Fluor 488	ThermoFisher	A-11034	1:1000	IF
Goat	Rabbit IgG	Alexa Fluor 488	Abcam	ab150077	1:1000	IF