

Supplementary Table 1. PCR primer sequences for mutagenesis (5'→3').

shNC	CCGGGCAAGCTGACCCTGAAGTTCATCTCGAGATGAACTTCAGGGTCAGCTTGCTTTTTT
shFBW7.1	CCGGCCTAAAGAGTTGGCACTCTATCTCGAGATAGAGTGCCAACCTTTAGGTTTTT
shFBW7.2	CCGGTCAAACCAGGTGCAATTATTTCTCGAGAAATAATTGCACCTGGTTTGATTTTTG
Myc-FBW7 ΔF F	CAGTTTCAATGCAAAGAAGAGGGGATTG
Myc-FBW7 ΔF R	CTTCTTTGCATTGAAACTGGGGTTCTATC
Myc-FBW7 ΔWD40 F	GTGCTGAAACTAGTCACATTGGAGAGTG
Myc-FBW7 ΔWD40 R	ATGTGACTAGTTTCAGCACCTTAGGAG
Flag-PD-1 K210R F	GCCAGCCCCTGAGGGAGGACCCCTCAGCCGTGCCTGTGT
Flag-PD-1 K210R R	GGCTGAGGGGTCTCCCTCAGGGGCTGGCCGGTGCCCT
Flag-PD-1 K233R F	TTCCAGTGCGGAGAGAGGACCCCGGAGCCCCCGTGCCCT
Flag-PD-1 K233R R	TCCGGGGTCTCTCTCGCCACTGGAAATCCAGCT
Flag-PD-1 S261A F	ATGGGCACCTCAGCCCCGCCCCGAGGGGCTCAGCT
Flag-PD-1 S261A R	CCTGCGGGCGGGGGCTGAGGTGCCCATTCGCTAGGAAAG
Flag-PD-1 S261D F	GAATGGGCACCTCAGACCCCGCCCGAGGGGCTCAGCT
Flag-PD-1 S261D R	CTGCGGGCGGGGTCTGAGGTGCCATTCCGCTAGGAAAG
Flag-PD-1 ΔPEST F	GACCCCGGAGCCCCCGTGCCCCGAGGGGCTCAGCTGACGGCCCT
Flag-PD-1 ΔPEST R	CCGTCAGCTGAGCCCCTGCGGGGCACGGGGGGCTCCGGGGTCTT
Flag-PD-1 ΔNLS F	CACGAGGGACAATAGGAGCCCCCGTGCCTGTGTCCCTGAG
Flag-PD-1 ΔNLS R	TCAGGGACACAGGGCACGGGGGCTCCTATTGTCCCTCGTGC

Supplementary Table 2. Antibody sources for Western blot, IP, IF and IHC.

Antibody for Western blot	Brand & Catalog No.	Dilution
FBW7	Santa Cruz, sc-33196	1/200
Human PD-1	Cell Signaling Technology, #86163	1/1000
Mouse PD-1	Proteintech, 66220-1-Ig	1/2000
β -actin	Cell Signaling Technology, #4970	1/1000
α -tubulin	Cell Signaling Technology, #2125	1/2000
Lamin A/C	Boster, BA1227	1/2000
Ub	R&D, MAB701	1/1000
CDK1	Proteintech, 19532-1-AP	1/1000
Importin α	Proteintech, 18137-1-AP	1/2000
Phosphoserine	Abcam, ab9332	1/500
Myc tag	Abbkine, #A02060	1/2000
Flag tag	Abbkine, #A02010	1/2000
His tag	Abbkine, #A02050	1/2000
HA tag	Abbkine, #A02040	1/2000
HRP-Rabbit IgG	Cell Signaling Technology, #7074	1/5000
HRP-Mouse IgG	Cell Signaling Technology, #7076	1/5000
Antibody for IP	Brand & Catalog No.	Dilution
Flag tag	Sigma, F3165	1/500
PD-1	Cell Signaling Technology, #86163	1/500
FBW7	Santa Cruz, sc-33196	1/50
Antibody for IF	Brand & Catalog No.	Dilution
PD-1	Cell Signaling Technology, #86163	1/200
Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594)	Abcam, ab150080	1/500
Antibody for FCM	Brand & Catalog No.	Dilution
PD-1	Abcam, ab279695	1/500
Antibody for IHC	Brand & Catalog No.	Dilution
FBW7	Santa Cruz, sc-33196	1/50
Human PD-1	Cell Signaling Technology, #86163	1/200
Mouse PD-1	Proteintech, 66220-1-Ig	1/4000
Ki67	Abcam, ab15580	1/200
pan Cytokeratin	Abcam, ab7753	1/1000
Human CD8	Cell Signaling Technology, #85336	1/100
Mouse CD8	Cell Signaling Technology, #98941	1/200