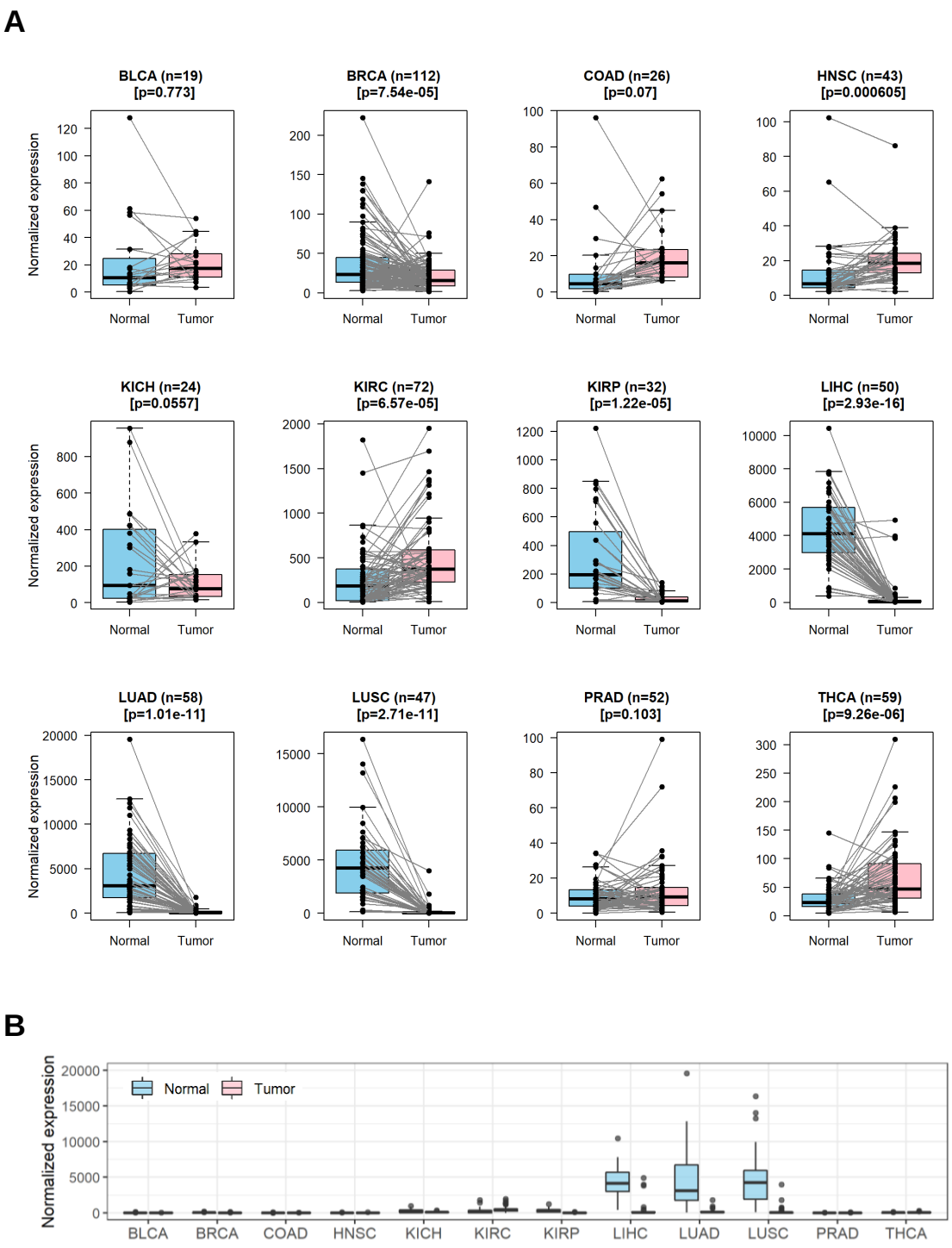
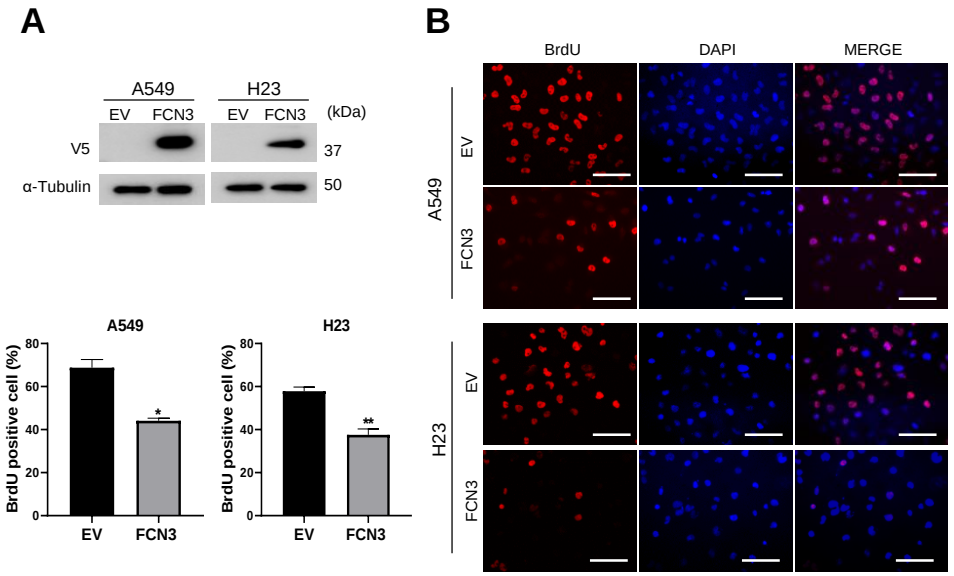
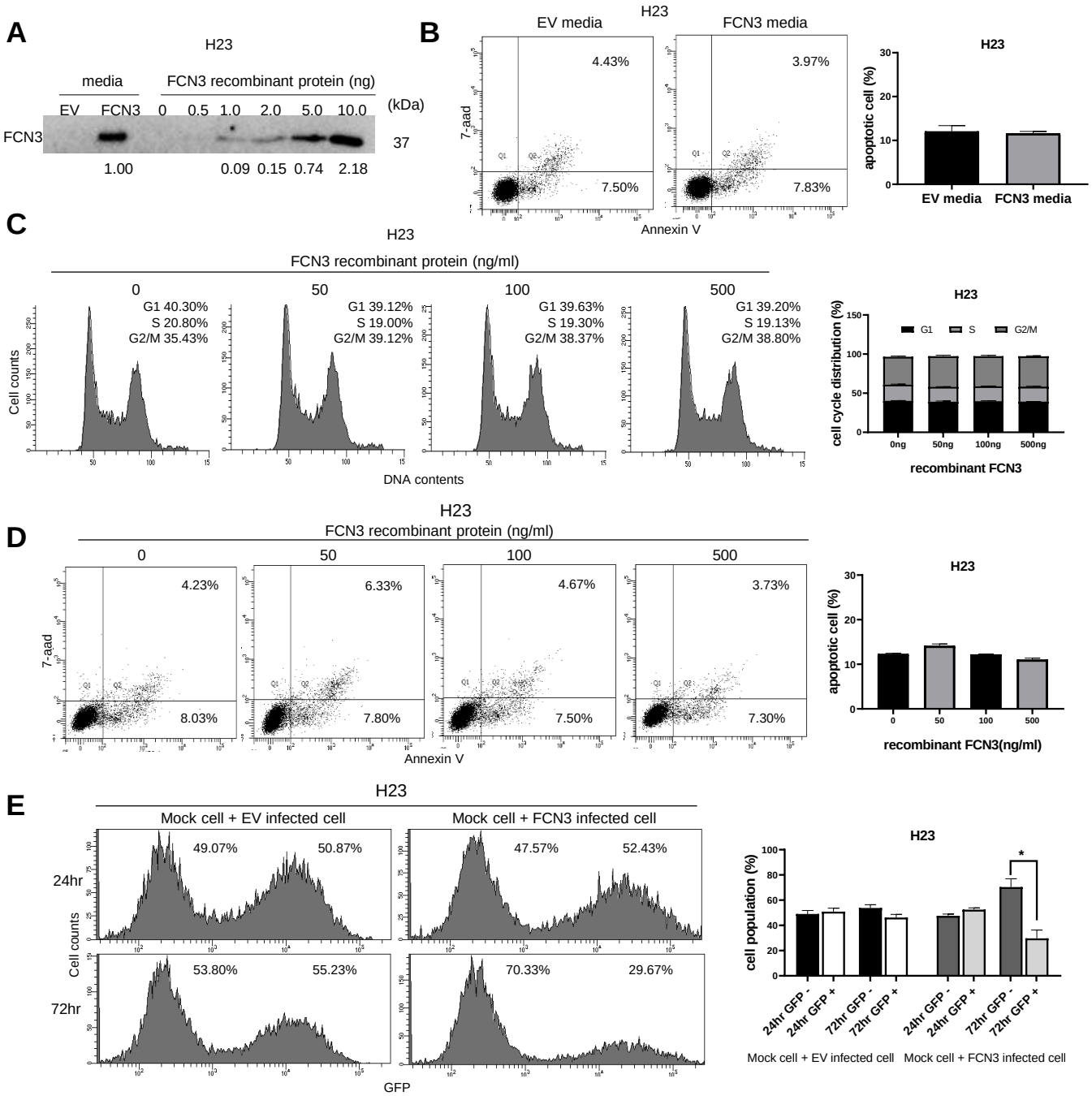


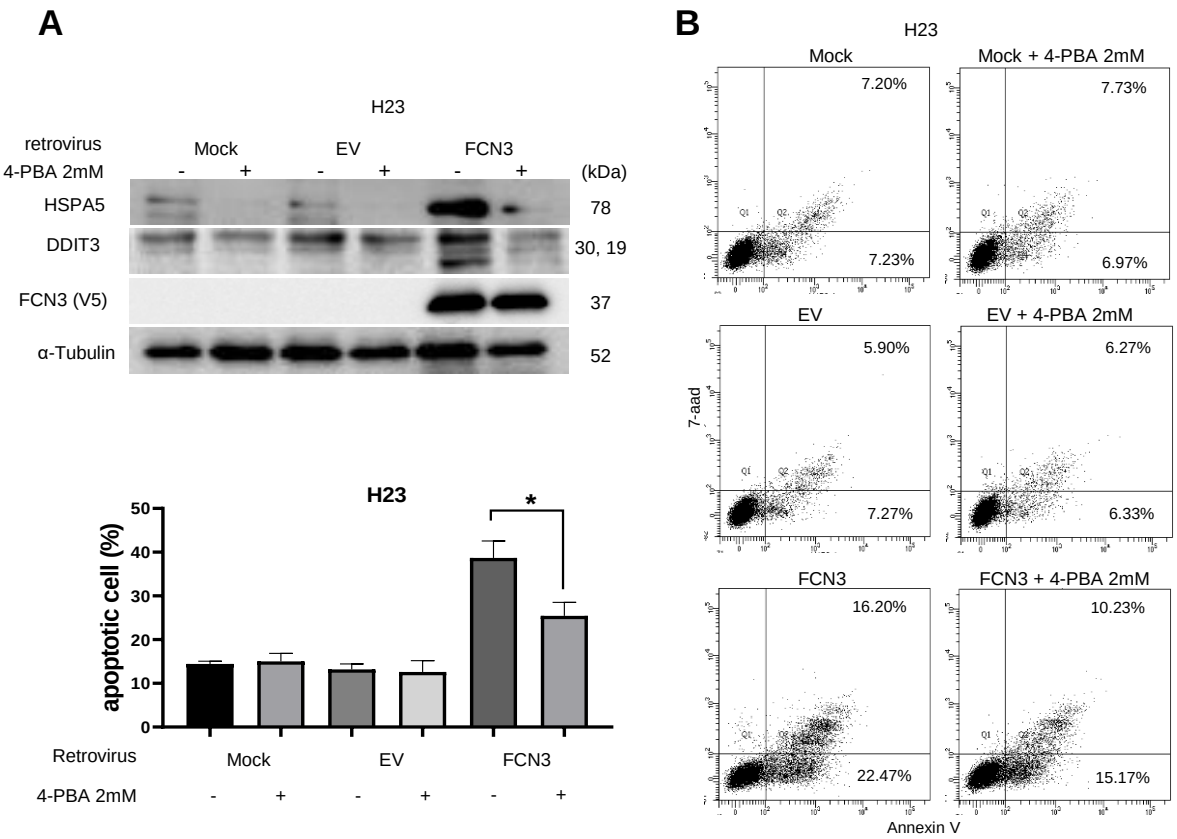
Supplementary Fig. 1. Expression analysis of *FCN3* using normal-tumor matched patient data from TCGA.



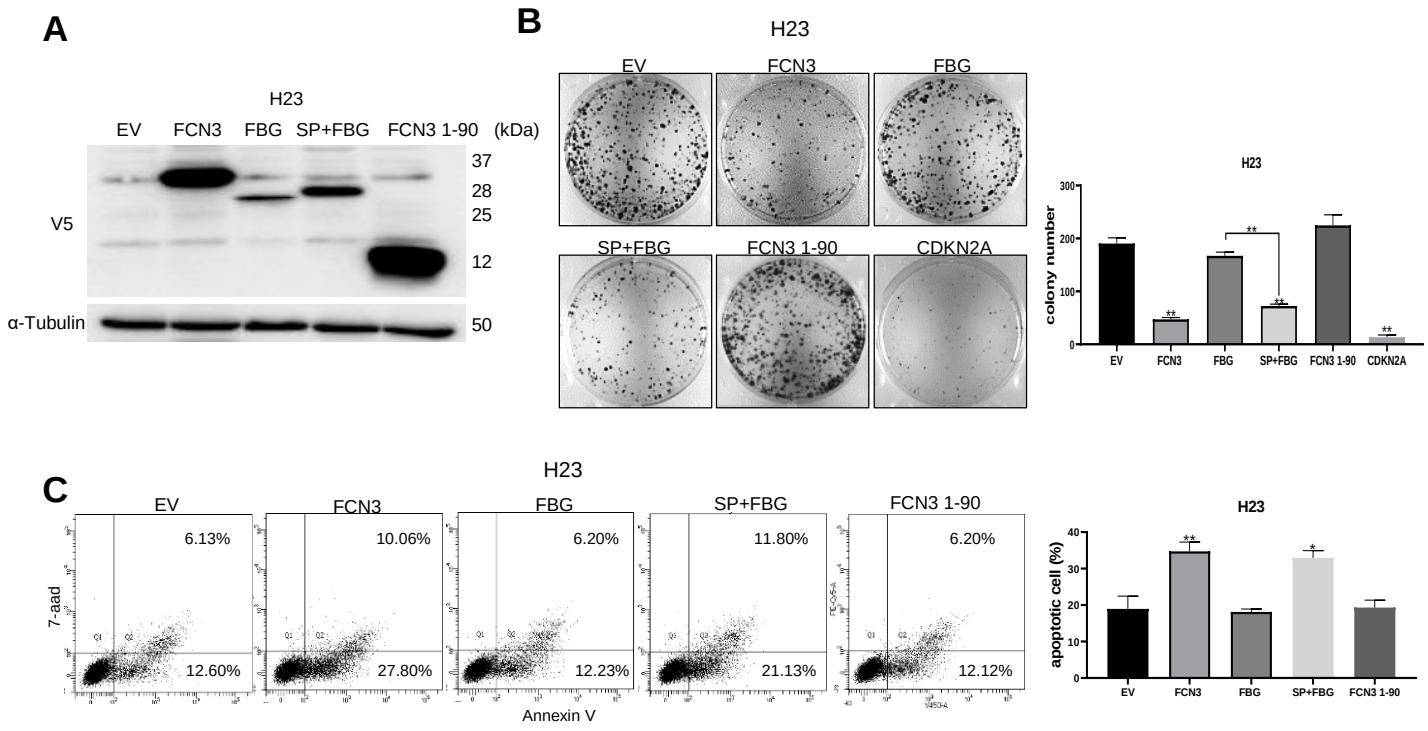
Supplementary Fig. 2. Expression of FCN3 and BrdU labeling.



Supplementary Fig. 3. Tumor suppressor activity of FCN3 involves an intracellular mechanism.



Supplementary Fig. 4. FCN3 induces ER stress in H23 cells.



Supplementary Fig. 5. Tumor suppressor activity of FCN3 derivatives in H23 cells.

Gene	Oligonucleotide sequence (5'→3')	
FCN3	Forward	CCCAGTCTTTTGTGACATGGA
	Reverse	CCTGCTCTGTAGGAGGACCA
ATF6	Forward	AGTTCGTCAGTTCCTCCTTACCTC
	Reverse	AGTTCTCTGCCTGCCACCAAG
CCNA2	Forward	TGCATCTCTGGGCGTCTTTG
	Reverse	ACCCGGCCAAAGAATAGTCG
CHAC1	Forward	TGGTGACGCTCCTTGAAGATC
	Reverse	GCACTGCCTCTCGCACATT
DDIT3	Forward	GCTCAGGAGGAAGAGGAGGA
	Reverse	TCCTGCTTGAGCCGTTCATT
E2F8	Forward	GGACAGTACCTGCTTGCCTT
	Reverse	GGAGGTCGCTTGACAGGAAA
HSPA5	Forward	CACTCCTGAAGGGGAACGTC
	Reverse	ACCACCTTGAACGGCAAGAA
MCM2	Forward	AATTTCGTCCTGGGTCCTTT
	Reverse	CACTTTGCCTGGACTCTCCT
MCM4	Forward	TTCTTTGACCGTTACCCTGA
	Reverse	ACACTTGGCACTGGAAGAAG
TOP2A	Forward	GCTGGATCAGTGGCTGAAAT
	Reverse	AATGGGCTGCAAGAGGTTTA
XBP1	Forward	TTGCTGAAGAGGAGGCGGAAG
	Reverse	GGTCCAAGTTGTCCAGAATGC
ACTB	Forward	ACAGAGCCTCGCCTTTGC
	Reverse	GAAGCCGGCCTTGCACAT
HPRT1	Forward	ACACTGGCAAAACAATGCAG
	Reverse	GTGGGGTCCTTTTCACCAG

Supplementary Table 1. Oligonucleotide primers used in RT-PCR and quantitative real time RT-PCR.