

Supplementary material

Supplementary figure legends

Supplementary Figure 1, related to Figure 2. A. Chromatin fractionation of HCT116 wild type and *CtIP*-KO cells. The data shows different subcellular localization of CtIP and DICER1. B. Western blot shows the expression level of DICER1 is not changed in *CtIP*-KO cells. C. Expression levels of pre-miR302b in wild type and *CtIP*-KO cells were verified by qPCR. The data represent the means \pm SD of three independent experiments. The *P* value is indicated as $**P < 0.01$.

Supplementary Figure 2, related to Figure 3. Coomassie blue staining of SDS-PAGE shows the purified proteins used in Figure 3A and 3B.

Supplementary Figure 3, related to Figure 7. Non-invasive in vivo fluorescence imaging of tumor progression over time in the orthotopic colorectal cancer model. Top: representative fluorescence images. Scale bars, 1cm. Bottom: quantification of fluorescence intensity. The data represent the means \pm SD.

Supplementary Figure 4, related to Figure 7. A. Expression levels of indicated mature miRNAs in wild type tumor and *CtIP*-KO tumor were verified by qPCR. B. Quantification of tumor weights (left) and frequency of metastases (right) in *CtIP*-KO cells expressing control vector (Ctrl) or miR302b inhibitor. Data represent mean \pm SD.

Supplemental Table S1:

Gene-specific primers used in the study (purchased from GeneCopoeia)

Product ID	Accession	Code
HmiR-AN0381	MIMAT0000684	hsa-miR-302a-3p
HmiR-AN0383	MIMAT0000715	hsa-miR-302b-3p
HmiR-AN0384	MIMAT0000717	hsa-miR-302c-3p
HmiR-AN0387	MIMAT0000718	hsa-miR-302d-3p
HmiR-AN0169	MIMAT0004595	hsa-miR-135a-3p
HmiR-AN0171	MIMAT0004698	hsa-miR-135b-3p
HmiRQP9001	NR_125730	hsnRNA U6-2

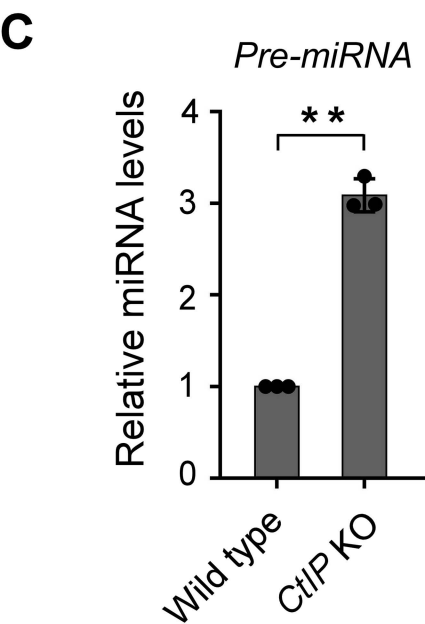
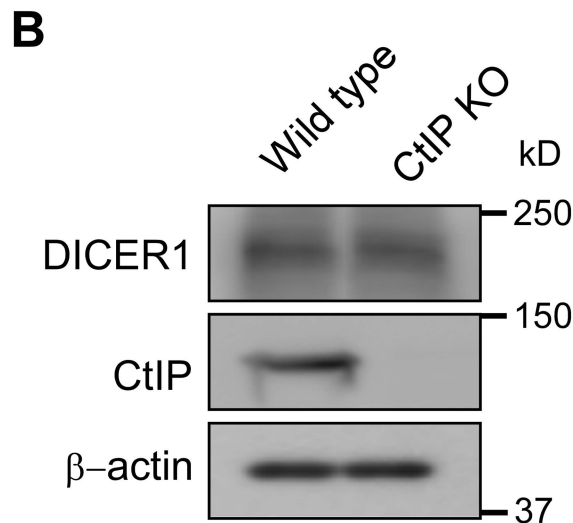
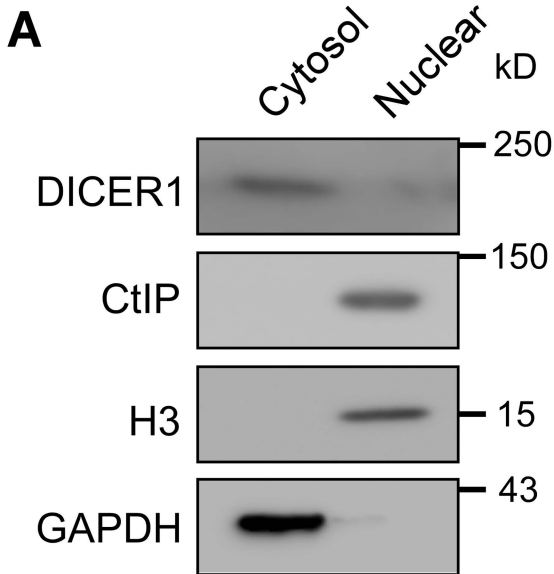
Supplemental Table S2

Other primers used in the study

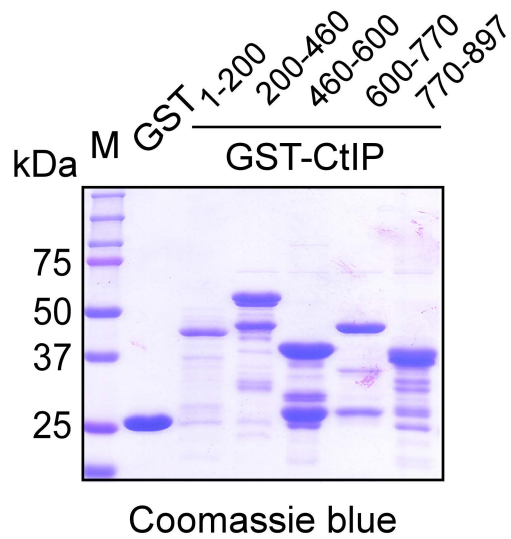
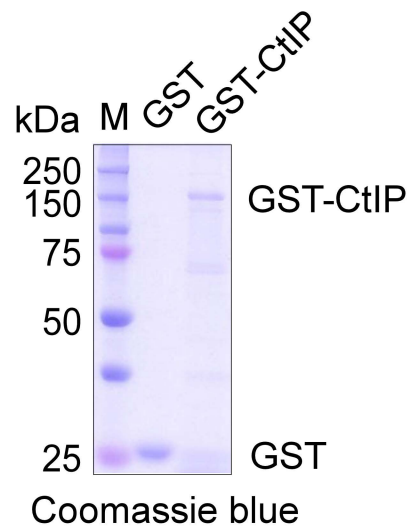
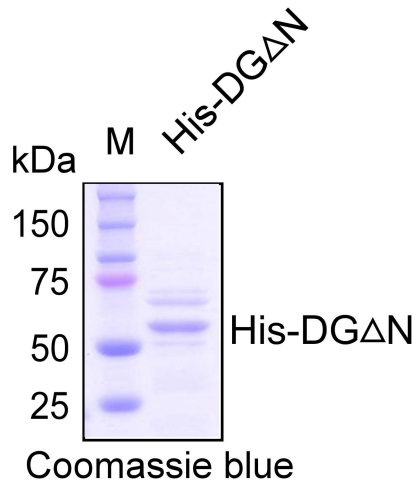
Pri-302A F	CACTTAAACGTGGATGTACTTGCT
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Pri-302A R	AAATATATGAGCTGCGGTCAATAC
Pri-302B F	TATGCCATTTTGTTCCTTTCTC
Pri-302B R	CTCCTACTAAAACATGGAAGCAC
Pri-302C F	CTTTAACATGGGGGTACCTGC
Pri-302C R	AGCCCAGTCTTGGAAAAAGTTAG
Pri-302D F	CTTTAACATGGAGGCACTTGCTG
Pri-302D R	GCAACAGTAATGGCCTGTAGCC
Pri-135a F	CTATGGCTTTTATTCCTATGTGA
Pri-135a R	GAGGCAAGTGGGAATAGAGG
Pri-135b F	TATGGCTTTTCATTCCTATGTGAT
Pri-135b R	AAGGTTACCAGATCCCGTGATG
Pre-302B F	GCTCCCTTCAACTTTAACATGGAAG
GAPDH F	CCCTCTGGTGGTGGCCCTT
GAPDH R	GGCGCCAGACACCCAATCC

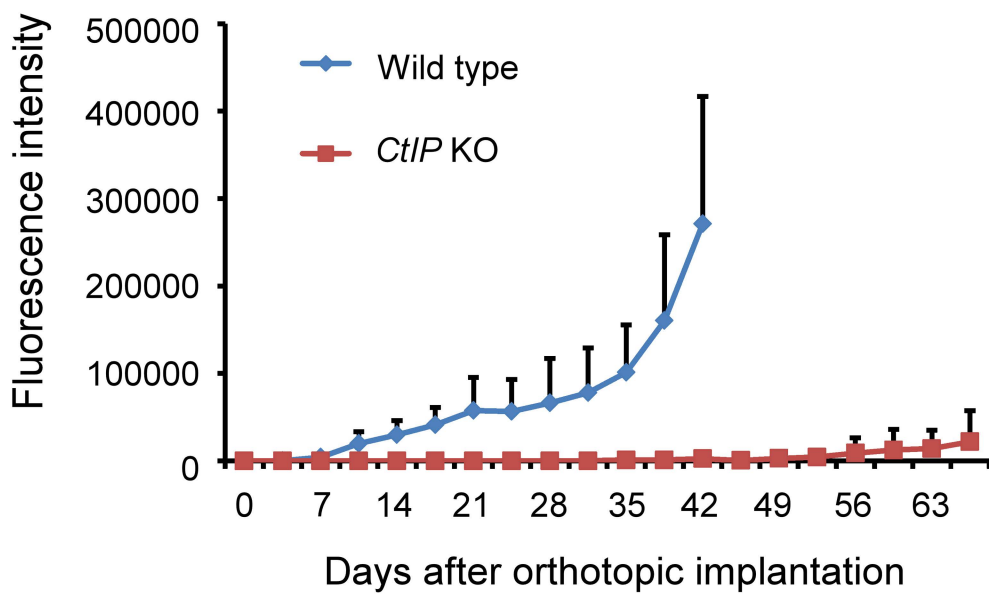
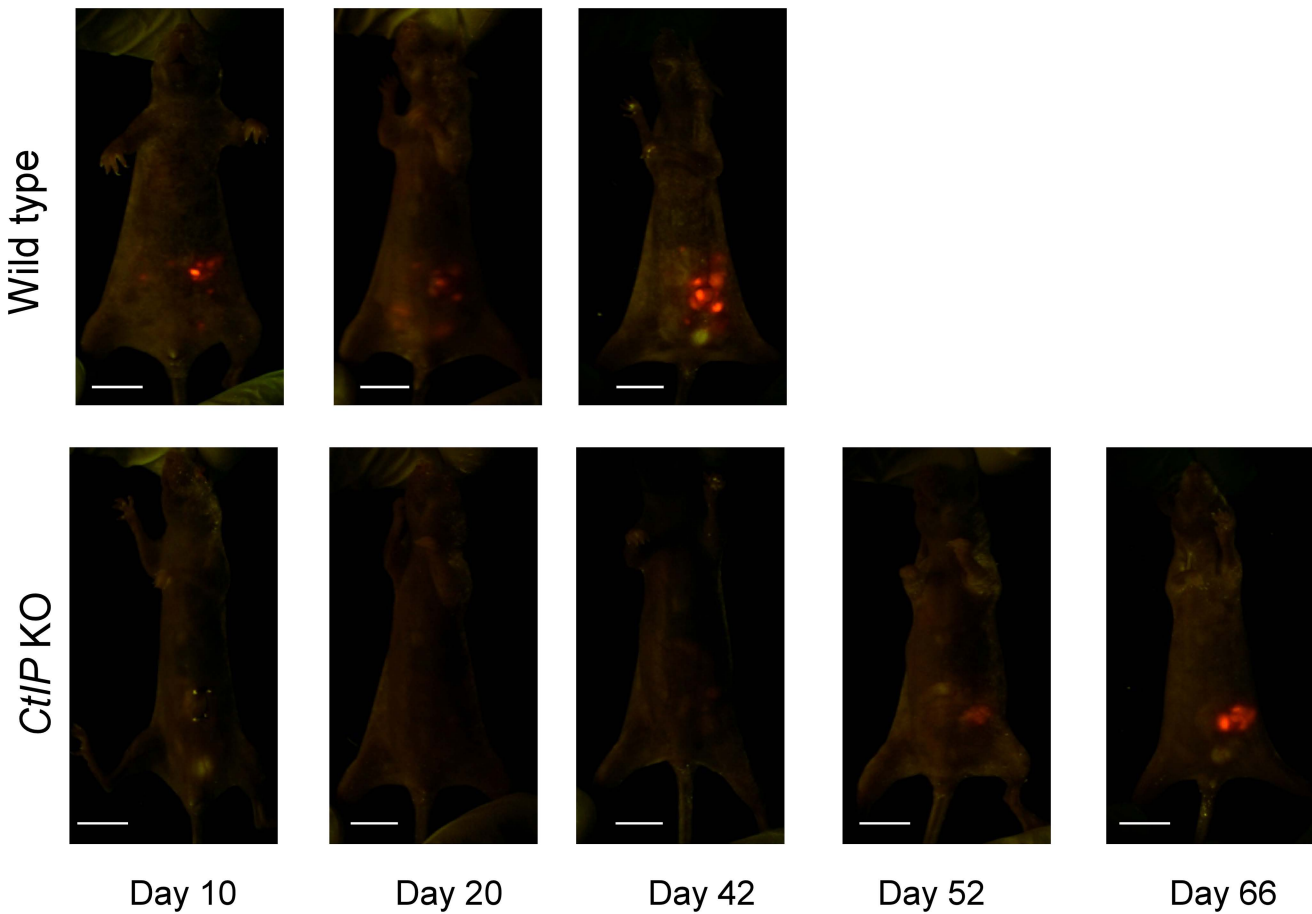
F: forward; R: reverse



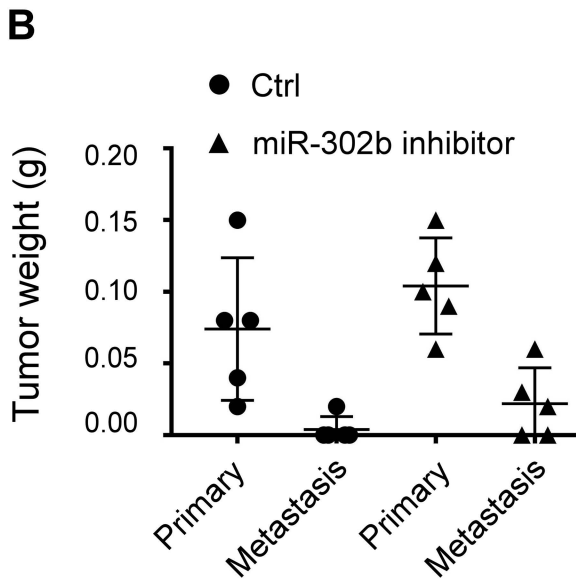
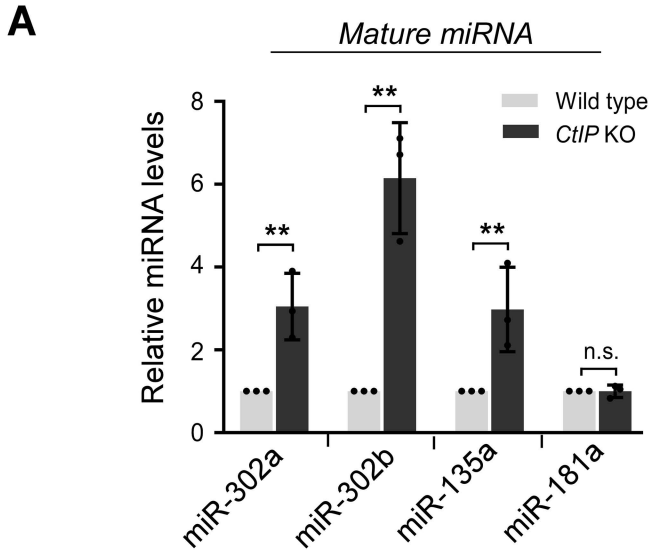
Supplementary Figure 1



Supplementary Figure 2



Supplementary Figure 3



Frequency of metastasis

	Ctrl	miR-302b inhibitor
Bowel wall	0/5	3/5
Peritoneal cavity	1/5	1/5
Mesentery lymph node	0/5	0/5
Liver	0/5	0/5