

**Supplementary Table 1: Clinicopathological characteristics of UC cases**

Characteristic	Normal (n=41)	Acute phase (n=40)	Remission phase			CAN	
			MES0 (n=39)	MES1-2 (n=34)	High-grade dysplasia (n=13)	Cancer (n=13)	
Gender	Male	22	28	18	20	6	7
	Female	19	11	21	14	7	6
Age at diagnosis, y (median, range)	—	38 (13-80)	36 (5-62)	34 (13-67)	30 (13-65)	24 (9-77)	
Age at operation or biopsy , y (median, range)	70 (44-90)	72 (44-90)	52 (18-78)	34 (13-67)	50 (32-81)	53 (27-88)	
Disease duration, y (median, range)	—	4 (0-25)	16 (3-35)	8 (0-40)	18 (8-28)	17 (1-36)	
Extent of disease	Left side	—	0	1	8	0	1
	Total	—	40	38	17	12	11
	Others	—	0	0	9	1	1

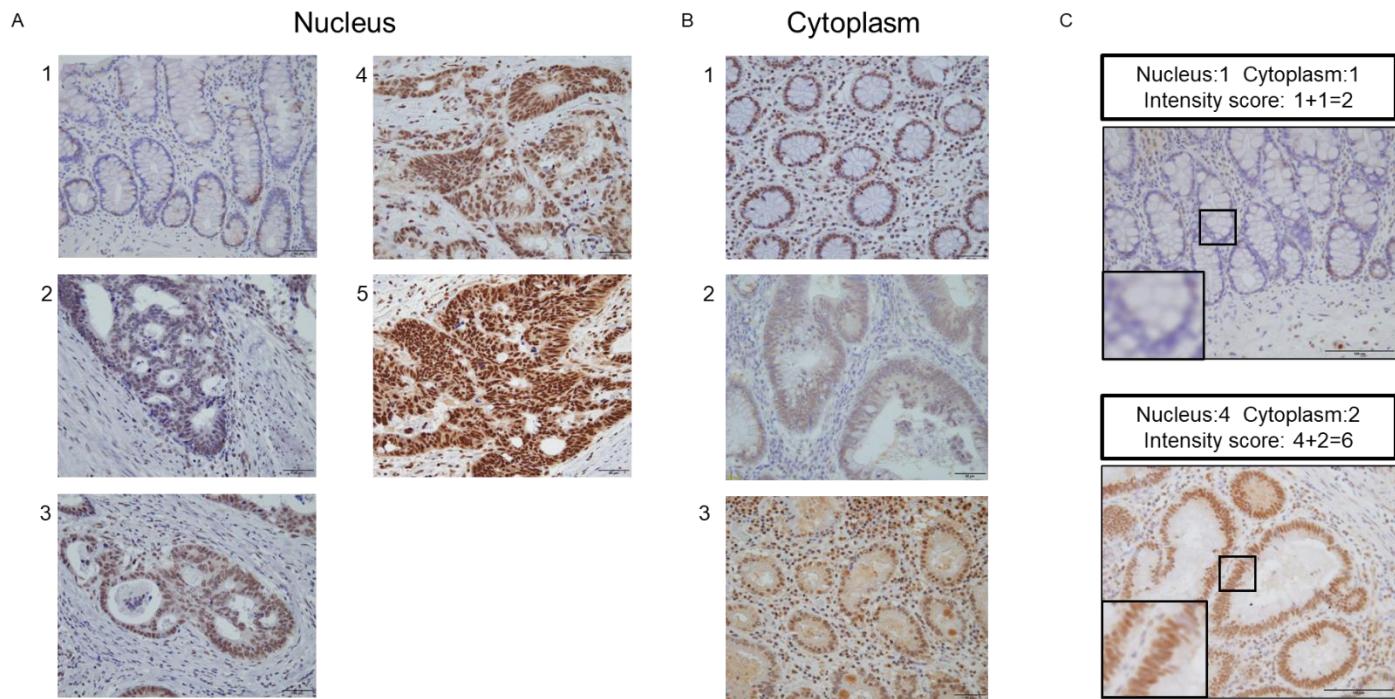
CAN: Colitis-associated neoplasm, MES: Mayo endoscopic score

**Supplementary Table 2: Primer sequences for PCR**

<b>Primers for RNA editing site-specific quantitative PCR</b>	
<b>Gene</b>	<b>Primer sequence</b>
Wild-type AZIN1	Forward: CATTCAAGCTCAGGAAGAAGACATCT
	Reverse: AATACAAGGAAGATGAGCCTCTGTTAC
Edited AZIN1	Forward: ACTGAATGACATCATGTAATAAATGGCT
	Reverse: GAGCTTGATCAAATTGTGGCAG
<b>Primers for qRT-PCR</b>	
<b>Gene</b>	<b>Primer sequence</b>
ADAR1 (human)	Forward: CCCTTCAGCCACATCCTTC
	Reverse: GCCATCTGCTTGCCACTT
IFN $\beta$ (human)	Forward: GCCATCAGTCACTTAAACAGC
	Reverse: GAAACTGAAGATCTCCTAGCCT
GAPDH (human)	Forward: CTGCACCACCAACTGCTTAG
	Reverse: GTCTTCTGGGTGGCAGTGAT

Obtained from IDT (Coralville, IA, USA).

### Supplementary Figure 1: Immunohistochemical staining scoring of ADAR1



ADAR1 staining intensity was evaluated in the nucleus and cytoplasm, respectively. ADAR1 staining score was evaluated for nucleus and cytoplasm separately with our scoring system, measured three times by three independent investigators blinded to the nature of the specimens.