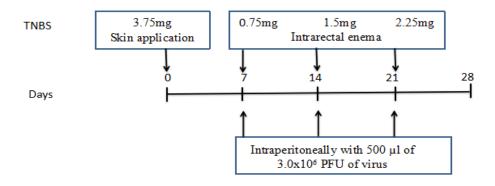
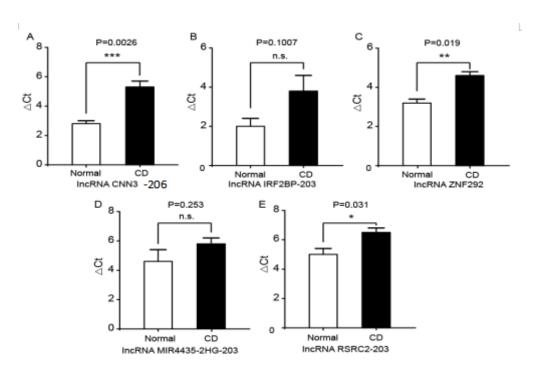
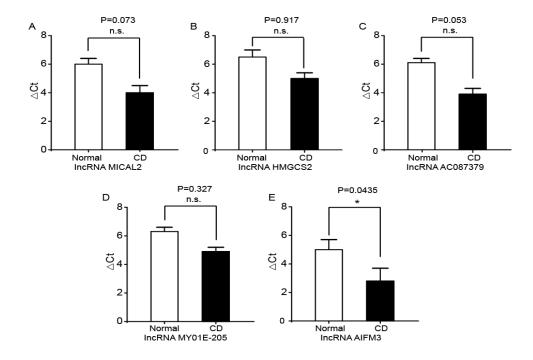


Supplementary Figure 1 Tests on the efficacy of lentivirus transfection. The intestinal epithelial cells Caco2 and HT-29 are adherent cells. According to the distribution of green fluorescence, the transfection efficiency is very high.

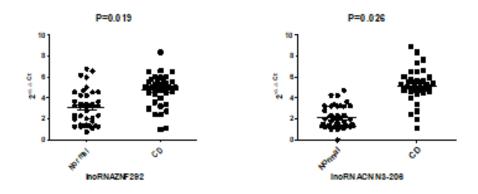


Supplementary Figure 2 Schematic illustration of construction of TNBS-induced mouse CD model.



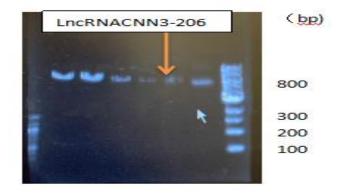


Supplementary Figure 3 Verification of the differentially expressed lncRNAs.

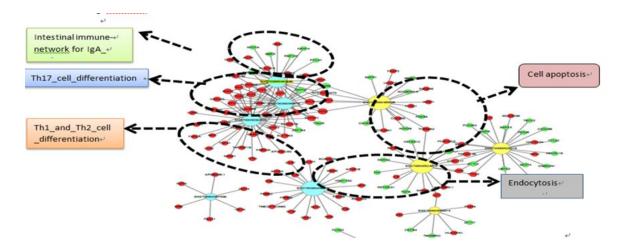


Supplementary Figure 4 Overexpression of lncRNACNN3-206 and lncRNAZNF292 in 40 normal and 40 diseased intestinal mucosa tissue samples

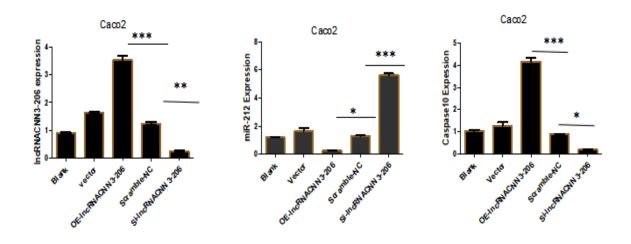
| Transcript: CNN3-206 ENST00000487539.1 | | | | | | | | |
|--|-----------------------|------|--|----------------------|-------------|-----------------|------------------------------------|-------------------------------|
| Description | | | calponin 3 [Source:HGNC Symbol;Acc:HGNC:2157@] | | | | | |
| Location | | | <u>Chromosome 1: 94,897,947-94,903,321</u> reverse strand. | | | | | |
| About this transcript | | | This transcript has <u>5 exons</u> , is associated with <u>1264 variations</u> and maps to <u>359 oligo probes</u> . | | | | | |
| Gene | | | This transcript is a product of gene ENSG00000117519 Hide transcript table | | | | | |
| Show/hi | de columns (1 hidden) | | | | | | | Filter |
| Name | Transcript ID | bp 🍦 | Protein | Biotype | CCDS | UniProt | RefSeq | Flags |
| CNN3-201 | ENST00000370206.8 | 2165 | <u>329aa</u> | Protein coding | CCDS30775 ₽ | <u>Q15417</u> ₽ | NM_001839& NP_001830& | TSL:1 GENCODE basic APPRIS P1 |
| CNN3-202 | ENST00000394202.8 | 1974 | 283aa | Protein coding | CCDS65593₽ | Q15417@ | NM_001286055@ NP_001272984@ | TSL:2 GENCODE basic |
| CNN3-207 | ENST00000545882.5 | 1902 | <u>288aa</u> | Protein coding | CCDS65592 ಘ | Q15417@ | NM_001286056 ខា NP_001272985 ខា | TSL:2 GENCODE basic |
| CNN3-203 | ENST00000415017.1 | 792 | <u>185aa</u> | Protein coding | - | E9PDU6₽ | - | CDS 3' incomplete TSL:2 |
| CNN3-206 | ENST00000487539.1 | 739 | No protein | Processed transcript | _ | - | - | TSL:2 |
| CNN3-204 | ENST00000461018.5 | 568 | No protein | Processed transcript | - | - | - | TSL:2 |
| CNN3-205 | ENST00000474409.1 | 544 | No protein | Processed transcript | - | - | - | TSL:3 |

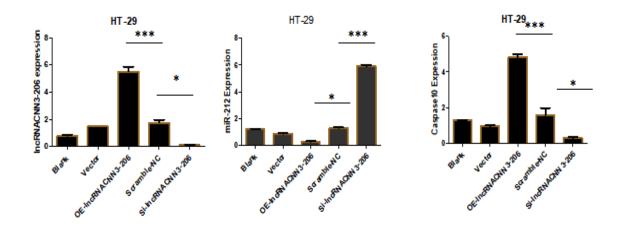


Supplementary Figure 5 Confirming lncRNA CNN3-206 by biogene website and PCR gel swiming.

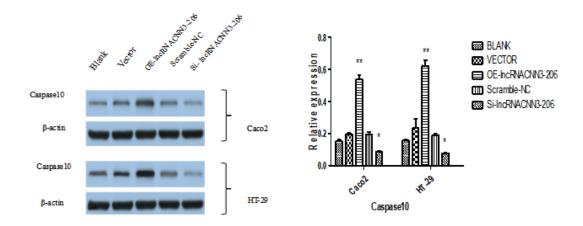


Supplementary Figure 6 CNC analysis on target mRNAs and functions potentially regulated by the top lncRNAs.





Supplementary Figure 7 Manipulation of lncRNA CNN3-206 expression in Caco2 and HT-29 cell lines led to altered expression of miR-212 expression and Caspase10.



Supplementary Figure 8 Correspondent changes of Caspase10 after manipulation of lncRNACNN3-206 expression in Caco2 and HT-29 cell lines.