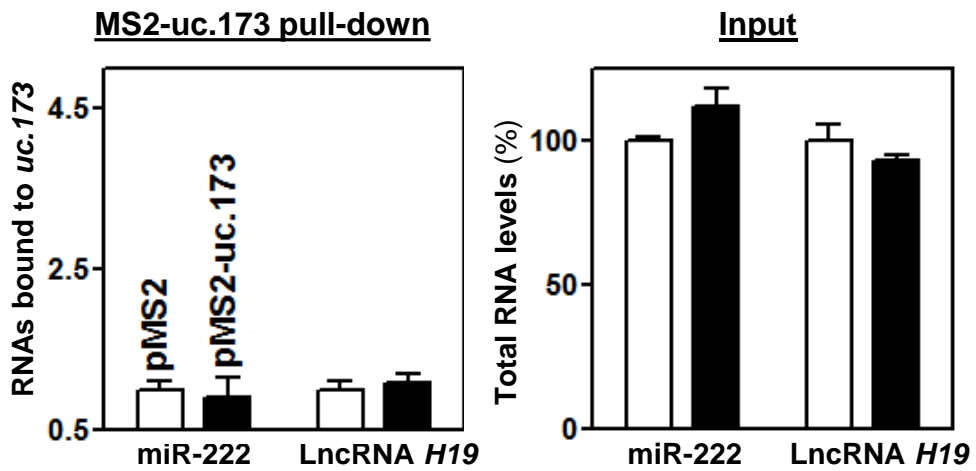
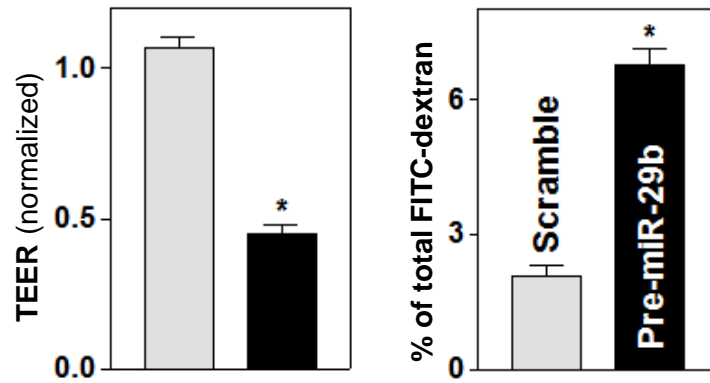


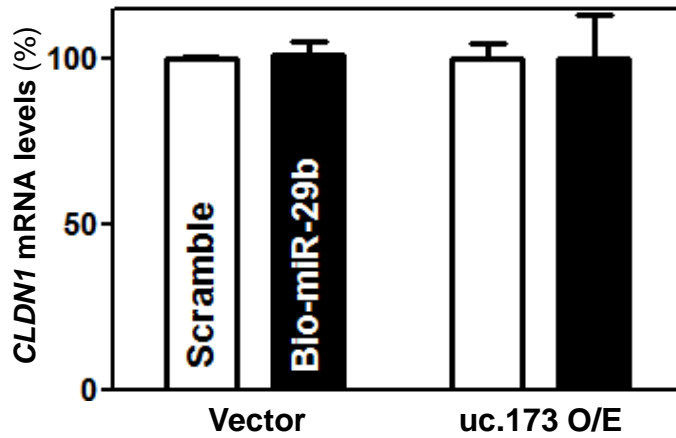
Supplementary FIG. 1: Changes in the levels of *CLDN1* mRNA after *uc.173* silencing (A) and *uc.173* overexpression (B). After Caco-2 cells were transfected with anti-*uc.173* or *uc.173* expression vector, total RNA was harvested 48 h thereafter. The levels of *CLDN1* mRNA were measured by Q-PCR analysis. Values are means \pm SEM of data from triplicate experiments.



Supplementary FIG. 2: Binding of *uc.173* to miR-222 and lncRNA *H19*. Twenty-four hour after co-transfection with pMS2-GST and pMS2 or pMS2-*uc.173* vectors, levels of miR-222 and H19 in the materials pulled down by pMS2-*uc.173* (*left*) and total input RNAs (*right*) were examined by Q-PCR analysis. Values are means \pm SEM from triplicate experiments.



Supplementary FIG. 3: Ectopically expressed miR-29b disrupts the epithelial barrier function. Caco-2 cells were transfected with pre.-miR-29b, TEER (*left*) and FITC-dextran paracellular permeability (*right*) were examined 48 h thereafter. Values are means \pm SEM of data from six samples. * $P < 0.05$ compared with scramble.



Supplementary FIG. 4: Changes in the levels of input *CLDN1* mRNA after cotransfection with biotin-miR-29b and *uc.173* expression vector. Twenty-four hours after cells were transfected with *uc.173* expression vector, they were transfected with bio-miR-29b. The levels of total *CLDN1* mRNA were examined 24 h thereafter. Values are means \pm SEM from triplicate experiments.

Supplementary Table 1 : Primers used in the study

Name	Sequence 5' to 3'
uc.173-Sense (S)	GGTACCAGTCCTTCAGTTTAGAACC
uc.173-Antisense (AS)	GATATCGTAATATTCATATATAA
Luc-5'UTR-S	GCTAGCCGGACCAGAAGCCAGGAG
Luc-5'UTR-AS	GAGCTCCTCAGTGGCAGGTGCAGAA
Luc-CR-S	GCTAGCTTGCAGCTTCTGGGTTTCAT
Luc-CR-AS	GAGCTCTCACACGTAGTCTTTCCCAGT
Luc-3'UTR-S	GCTAGCCCTCCTGGAGAGAATACAAA
Luc-3'UTR-AS	GAGCTCGGCACAGTAATTGTGGCAA
3'UTR-F1-S	GCTAGCAGCGGCGAAGGAAGAGAT
3'UTR-F1-AS	CTCGAGCCAGCTGCAGACCAAAGTG
3'UTR-F2-S	GCTAGCCATACTGTGTTTCTGAGCTGTGG
3'UTR-F2-AS	CTCGAGGGAGGAAATGAACTCATGACAA
3'UTR-F3-S	GCTAGCGCTGGTAGAGGTAATGCGAGT
3'UTR-F3-AS	CTCGAGCTGAAGGGCCTTTGCTACAG
3'UTR-F4-S	GCTAGCCTGTAGCAAAGGCCCTTCAG
3'UTR-F4-AS	CTCGAGCTGCGTCCCTCTTGACTCAT
3'UTR-F5-S	GCTAGCCATGCCTATGTCGCATGAGT
3'UTR-F5-AS	CTCGAGCAGCCCCCAAATATCAATTC
3'UTR-F3-Mut	TGCATGGCCTGTCGTTAATACTA