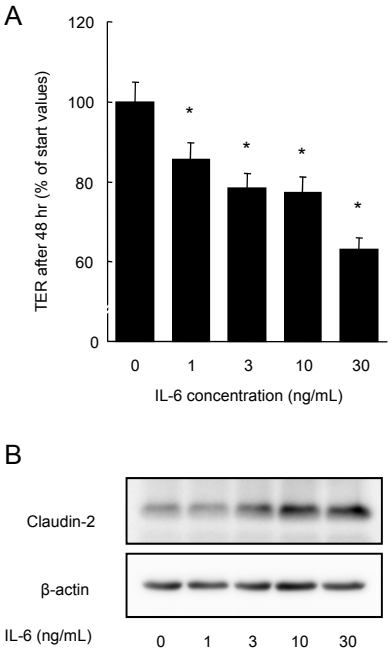
A
120
100
80
60
0
TER after 48 hr (% of start values)
*
*
*
*
0
1
3
10
30
IL-6 concentration (ng/mL)
B
Claudin-2
β-actin
IL-6 (ng/mL)
0
1
3
10
30

Fig. S1

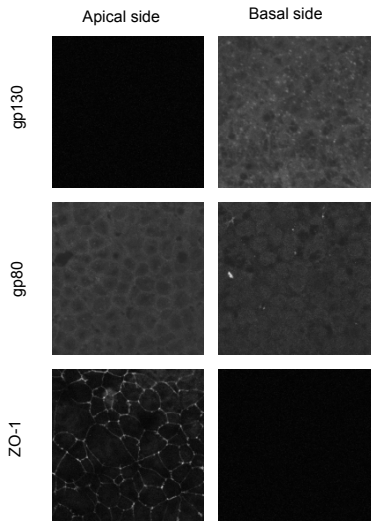

Fig. S2

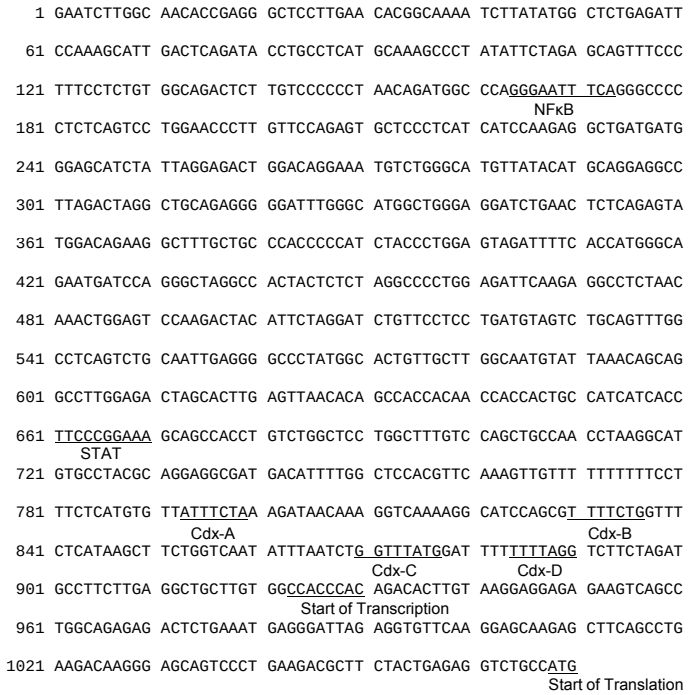
1 GAATCTTGGC AACACCGAGG GCTCCTTGAA CACGGCAAAA TCTTATATGG CTCTGAGATT
61 CCAAAGCATT GACTCAGATA CCTGCCTCAT GCAAAGCCCT ATATTCTAGA GCAGTTTCCC
121 TTTCCTCTGT GGCAGACTCT TGTCCCCCCT AACAGATGGC CCAGGGAATT TCAGGGCCCC
NFκB
181 CTCTCAGTCC TGGAACCCTT GTTCCAGAGT GCTCCCTCAT CATCCAAGAG GCTGATGATG
241 GGAGCATCTA TTAGGAGACT GGACAGGAAA TGTCTGGGCA TGTTATACAT GCAGGAGGCC
301 TTAGACTAGG CTGCAGAGGG GGATTTGGGC ATGGCTGGGA GGATCTGAAC TCTCAGAGTA
361 TGGACAGAAG GCTTTGCTGC CCACCCCCAT CTACCCTGGA GTAGATTTTC ACCATGGGCA
421 GAATGATCCA GGGCTAGGCC ACTACTCTCT AGGCCCCTGG AGATTCAAGA GGCCTCTAAC
481 AAACTGGAGT CCAAGACTAC ATTCTAGGAT CTGTTCCTCC TGATGTAGTC TGCAGTTTGG
541 CCTCAGTCTG CAATTGAGGG GCCCTATGGC ACTGTTGCTT GGCAATGTAT TAAACAGCAG
601 GCCTTGGAGA CTAGCACTTG AGTTAACACA GCCACCACAA CCACCACTGC CATCATCACC
661 TTCCCGGAAA GCAGCCACCT GTCTGGCTCC TGGCTTTGTC CAGCTGCCAA CCTAAGGCAT
STAT
721 GTGCCTACGC AGGAGGCGAT GACATTTTGG CTCCACGTTC AAAGTTGTTT TTTTTTCCT
781 TTCTCATGTG TTATTTCTAA AGATAACAAA GGTCAAAAGG CATCCAGCGT TTTCTGGTTT
Cdx-A
Cdx-B
841 CTCATAAGCT TCTGGTCAAT ATTTAATCTG GTTTATGGAT TTTTTTTAGG TCTTCTAGAT
Cdx-C
Cdx-D
901 GCCTTCTTGA GGCTGCTTGT GGCCACCCAC AGACACTTGT AAGGAGGAGA GAAGTCAGCC
Start of Transcription
961 TGGCAGAGAG ACTCTGAAAT GAGGGATTAG AGGTGTTCAA GGAGCAAGAG CTTCAGCCTG
1021 AAGACAAGGG AGCAGTCCCT GAAGACGCTT CTACTGAGAG GTCTGCCATG
Start of Translation

Fig. S3

SUPPLEMENTAL FIGURE LEGENDS

Fig. S1 **IL-6 increases TJ permeability and claudin-2 expression in T84 cell monolayers.** (A) TER was measured across T84 cell monolayers incubated with varying concentrations of IL-6 (0~30 ng/mL) for 48 hr. (B) Whole cell extracts of T84 cell monolayers incubated with varying concentrations of IL-6 (0~30 ng/mL) for 48 hr were immunoblotted for claudin-2 and β-actin. $*P < 0.05$ relative to the control value. Values represent the mean ± SEM (n = 4).

Fig. S2 **Localization of gp130 and gp80 differ in Caco-2 cell monolayers.** Caco-2 cells fixed with methanol were immunolabeled for gp130, gp80, and ZO-1 and the apical and basal images of cell monolayers were collected by confocal microscopy.

Fig. S3. **Sequence analysis of the 5'-flanking region of the human claudin-2 gene.** Potential binding sites are underlined.

Table S1. Primers used in quantitative RT-PCR

Target gene	Forward	Reverse
hClaudin-2	5’-CTCCCTGGCCTGCATTATCTC-3’	5’-ACCTGCTACCGCCACTCTGT-3’
hCdx-1	5’-TCGGACCAAGGACAAGTACC-3’	5’-GATCTTCACCTGCCGTTCAG-3’
hCdx-2	5’-CAGTCGCTACATCACCATCC-3’	5’-TTTCCTCTCCTTTGCTCTGC-3’
hβ-actin	5’-GCCGAGGACTTTGATTGCA-3’	5’-CTTCCTGTAACAACGCATCTCA-3’

Table S2. Primers used to delete transcriptional factor binding sites in site-directed mutagenesis of claudin-2 promoter

Deletion target	Forward	Reverse
Cdx-A	5’-AAGATAACAAAGGTCAAAAGGC-3’	5’-AACACATGAGAAAGGAAAAAAAAAAAC-3’
Cdx-B	5’-GTTTCTCATAAGCTTCTGGTC-3’	5’-CGCTGGATGCCTTTTGACC-3’
Cdx-C/D	5’-TCTTCTAGATGCCTTCTTGAG-3’	5’-CAGATTAAATATTGACCAGAAGC-3’
STAT	5’-AGCAGCCACCTGTCTGGCTCCTG-3’	5’-GGTGATGATGGCAGTGGTGGTTG-3’
NFκB	5’-GGGCCCCCTCTCAGTCCTGG-3’	5’-TGGGCCATCTGTTAGGGGGG-3’