

Figure S1 Hematoxylin and eosin-stained sections of wildtype mice before and at 2, 6, 11, and 15 days after *C. rodentium* infection. Related to Figure 1. Goblet cells (arrows) are progressively depleted and difficult to detect at days 11 and 15. Bar = $50 \mu m$.

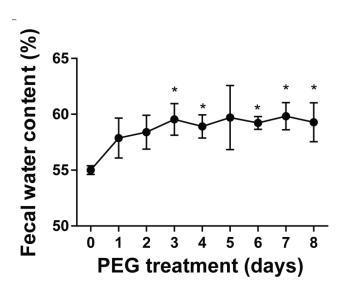


Figure S2 Wildtype (WT) mice received normal water or water containing 2% polyethylene glycol (PEG). Related to Figures 6 and 7. Fecal water content is shown.

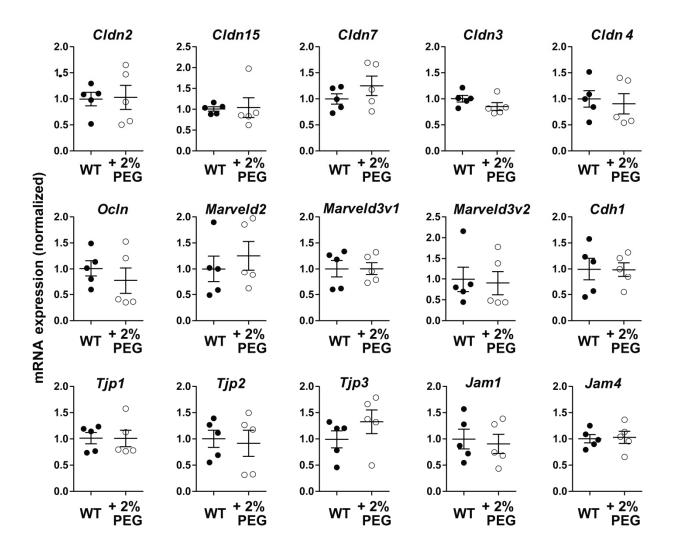


Figure S3 Colonic epithelia were isolated from wildtype (WT) mice or wildtype mice that received water with 2% polyethylene glycol (PEG) for 7 days. Related to Figures 6 and 7. Tight junction protein transcript numbers, after normalization keratin 8 transcripts and WT mice without PEG, are shown. No changes were significant.

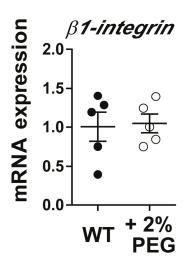


Figure S4 Colonic epithelia were isolated from wildtype (WT) mice or wildtype mice that received water with 2% polyethylene glycol (PEG) for 7 days. Related to Figures 6 and 7. Numbers of β_1 -integrin transcripts, after normalization keratin 8 transcripts and WT mice without PEG, are shown. Changes were not significant. See also Figures 6 and 7.

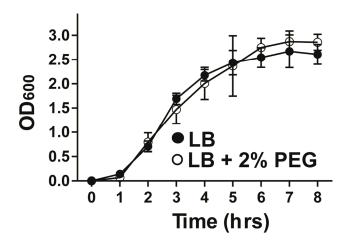


Figure S5 *C. rodentium* from a stationary phase culture were diluted 1:100 into fresh LB medium that did not or did contain 2% polyethylene glycol (PEG). Related to Figure 6. Growth through lag, log, and stationary phase was followed as OD_{600} for 8 hrs.

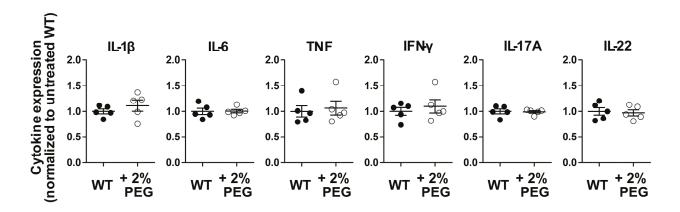


Figure S6 Colonic mucosal cytokine content was assessed by ELISA in in wildtype (WT) mice or wildtype mice that received water with 2% polyethylene glycol (PEG) for 7 days. Related to Figure 6. Data are normalized to wildtype mice receiving water without PEG. No changes were significant.

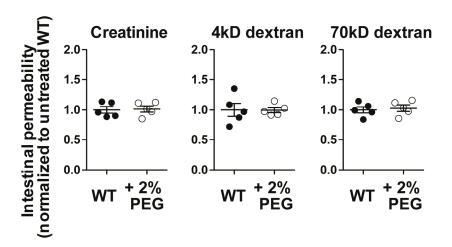


Figure S7 Intestinal permeability to creatinine, 4kD dextran, and 70 kD dextran were assessed in wildtype (WT) mice or wildtype mice that received water with 2% polyethylene glycol (PEG) for 7 days. Related to Figure 7. Data are normalized to wildtype mice receiving water without PEG. No changes were significant.

Supplemental Table I. PCR primers used. Related to STAR Methods.

Gene (mouse)	Forward primer (5' – 3')	Reverse primer (5' – 3')
Itgb1 (β_1 -integrin)	AGTGCTCCCACTTCAATCTCACCA	TCTCCTTGCAATGGGTCACAGGAT
Cldn2	GGCTGTTAGGCACATCCAT	TGGCACCAACATAGGAACTC
Cldn3	AAGCCGAATGGACAAAGAA	CTGGCAAGTAGCTGCAGTG
Cldn4	CGCTACTCTTGCCATTACG	ACTCAGCACACCATGACTTG
Cldn7	AGGGTCTGCTCTGGTCCTT	GTACGCAGCTTTGCTTTCA
Cldn8	GCCGGAATCATCTTCTTCAT	CATCCACCAGTGGGTTGTAG
Cldn15	CAGCTTCGGTAAATATGCCA	CAGTGGGACAAGAAATGGTG
Jam1 (F11r)	ACCCTCCCTCCTTTCCTTAC	CTAGGACTCTTGCCCAATCC
Jam4	GGACTCAGAGGCTCACTTCA	AGACTCAGCACCACCATTTG
Tjp1 (ZO-1)	AGGACACCAAAGCATGTGAG	GGCATTCCTGCTGGTTACA
Tjp2 (ZO-2)	ATGGGAGCAGTACACCGTGA	TGACCACCCTGTCATTTTCTTG
Tjp3 (ZO-3)	TCGGCATAGCTGTCTCTGGA	GTTGGCTGTTTTGGTGCAGG
OcIn	GCTGTGATGTGTGAGCTG	GACGGTCTACCTGGAGGAAC
MarvelD3 (variant 1)	GGGCTTCGGAAAGATACGTG	CACCGTCAAAGCCACTATAAG
MarvelD3 (variant 2)	CTCCTGGATTGCCACAAATG	GTGCCCTCAAAAGGTGAGTA
MarvelD2 (tricellulin)	CTCGGAGACATCGGGAGTTC	CCTGATCCCTCTGTCGATCACT
Cdh1 (E-cadherin)	TCCTTGTTCGGCTATGTGTC	GGCATGCACCTAAGAATCAG
Krt8	AAGGTGTGGAAAGAGCTAGCC	ATAGACGTTGACTGCACGCACT