

1 Supplementary Table 1

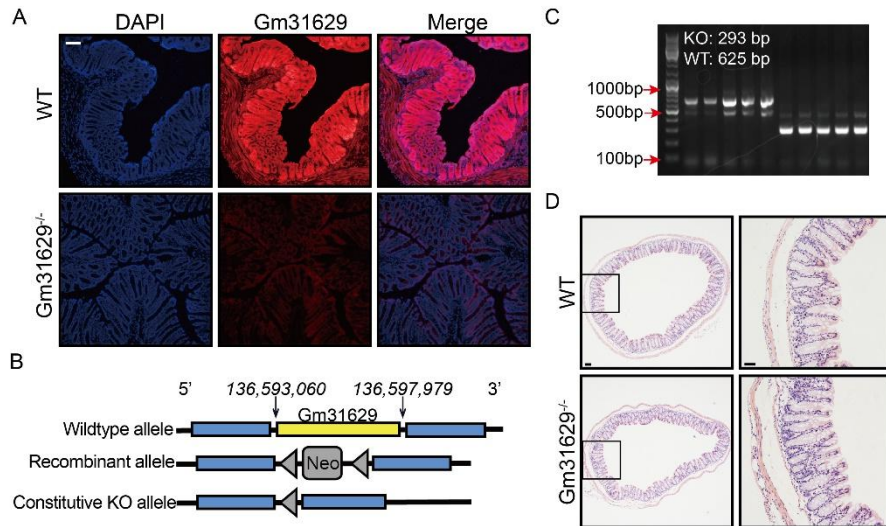
2 Nucleotide sequences of primers used for qRT-PCR

Mouse	F: GATCATTGCTCCTCCTGAGC
Actin	R: ACTCCTGCTTGCTGATCCAC
mouse	F: CTAAGCGAACTCGGGAGC
Gm31629	R: CACAGCAGGATTGATGGATG
Human	F: CGTGGACATCCGCAAAGAC
Actin	R: TCGTCATACTCCTGCTTGCTG
Human	F: GGAGTCCAGAAGGCGGTAGT
Gm31629	R: CTGAAAGTAGGTGCCGAGGA
Mouse	F: CCCTCACACTCAGATCATCTTCT
Tnf	R: GCTACGACGTGGGCTACAG
Mouse	F: GCAACTGTTCTGAACTCAACT
Il1b	R: ATCTTTTGGGGTCCGTCAACT
Mouse	F: CAGACCGTAACCATTATAGACGC
Yb-1	R: ATCCCTCGTTCTTTTCCCCAC
Mouse	F: TGCAGAAACGGCGCATCTAT
E2f1	R: CCGCTTACCAATCCCCACC
Mouse	F: ACGGCGCAACCTACAAAGAG
E2f2	R: GTCTGCGTGTAAGCGAAGT

Mouse	F: ACTCAGGGCCTATCCATGTG
E2f5	R: CTCAGGCAGGTTTTGAGCAG
Mouse	F: GCGTACCCTGACACCAATCTC
Ccnd1	R: CTCCTCTTCGCACTTCTGCTC
Mouse	F: AGAAGGTACTTACGGTGTGGT
Cdk1	R: GAGAGATTTCCCGAATTGCAGT
Mouse	F: TGGCATCATACAAGTTTGTGTGG
Cdc6	R: CAGGCTGGACGTTTCTAAGTTTT
Mouse	F: CAACTGGAACATATACTGCTCCG
Top2a	R: GGGTCCCTTTGTTTGTATCAGC
Mouse	F: ATCCACCACCGCTTCAAGAAC
Mcm2	R: TACCACCAAACCTCTCACGGTT
Mouse	F: CCTACTCGAAGACTTACCCAGT
Lgr5	R: GCATTGGGGTGAATGATAGCA
Mouse	F: AAGCACACCTTGACTGGTACG
Ascl2	R: AAGTGGACGTTTGCACCTTCA

3 (F, forward primer; R, reverse primer.)

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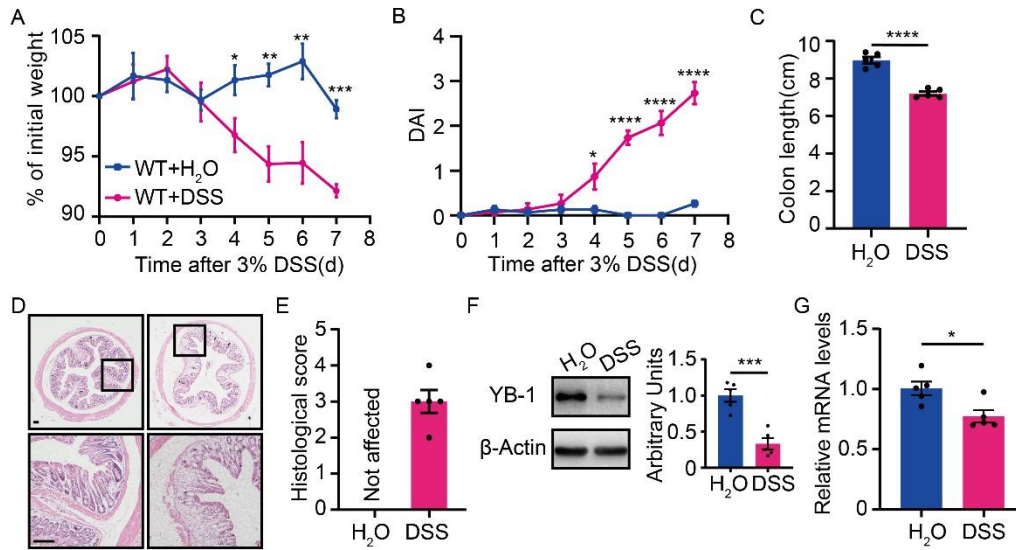
6 Supplementary Figure 1. Construction of Gm31629 knockout mouse

7 (A) Representative fluorescence in situ hybridization image of Gm31629 (Red) in

8 Gm31629^{-/-} mice and WT mice (Scale Bar 100μm). (B) Scheme of the mouse

9 Gm31629 knockout construct. (C) PCR image of genotyping data of Gm31629^{-/-} mice

10 and WT mice. (D) H&E stained sections of colon tissues (Scale Bar 100μm)



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12 Supplementary Figure 2. Intestinal YB-1 decreases in response to inflammatory
 13 stimuli

14 (A-E) Eight-week-old WT mice were subjected to 3%DSS in drinking water or tap
 15 water for 7 days and sacrificed on day 8 (n=5). (A) Body weight changes of mice. (B)
 16 Disease activity index (DAI) of mice during indicated period. (C) Measurement of
 17 colon length. (D) H&E stained sections of colon tissues (Scale Bar 100µm) (E)
 18 Quantification of histological score from colonic sections in panel D (F) The protein
 19 level of YB-1 in colon tissues. (G) qRT-PCR analysis of *Yb-1* in colon tissues. All data
 20 were represented as mean ± SEM. For comparisons of two groups, a two-tailed
 21 Student's t test was performed.