SUPPLEMENTARY DATA

Store-operated calcium entry (SOCE) contributes to phosphorylation of p38 MAPK and suppression of TNF-α signalling in the intestinal epithelial cells

Supplementary Fig. 1. Effect of acute application of YM-58483 against M3-mAChR- or PAR-2-induced persistent Ca^{2+} influx through SOCE.
Changes in cytosolic Ca^{2+} concentration are expressed as fluorescence ratio F/F0. (A) (B) HT-29/B6 cells were stimulated with CCh (A) or 2-f-LIGRLO (B). After that, 10 μM YM-58483 or DMSO (1:100, YM-58483 solvent) was added to the extracellular pool in the indicated time. Each trace of cytosolic Ca^{2+} levels were averaged of 52-69 cells (mean ±S.E.M.) Changes of cytosolic Ca^{2+} levels by YM-58483 were shown as ratio of Ca^{2+} value at 90 s after YM-58483 administration (T1) against just before YM-58483 administration (T2) in each right side. Values represent the means ± S.E.M. of 4 independent experiments. *p < 0.05 (two-tailed Student's t-test).

Supplementary Fig. 2. M3-mAChR- or PAR-2-evoke persistent Ca^{2+} influx is not dependent on STIM2.
Changes in cytosolic Ca^{2+} concentration are expressed as fluorescence ratio F/F0. Cells were incubated with STIM2-targeted siRNA for 3 days. Then cells were stimulated with CCh (100 μM, upper panel) or 2-f-LIGRLO (1 μM, lower panels). Each trace of cytosolic Ca^{2+} levels was averaged of 27-50 cells (mean ±S.E.M.) Cytosolic Ca^{2+} levels of 180 s after agonist stimulation were compared with bar graphs in each right panel. Values represent the means ± S.E.M. of 3 to 5 independent experiments. *p < 0.05 (two-tailed Student's t-test). ns, not significantly different. After Ca^{2+} experiments, cell lysates were subjected to immunoblot by using STIM2 antibodies to conform the effect of siRNA.
Supplementary Fig. 1

A

B
Supplementary Fig. 2