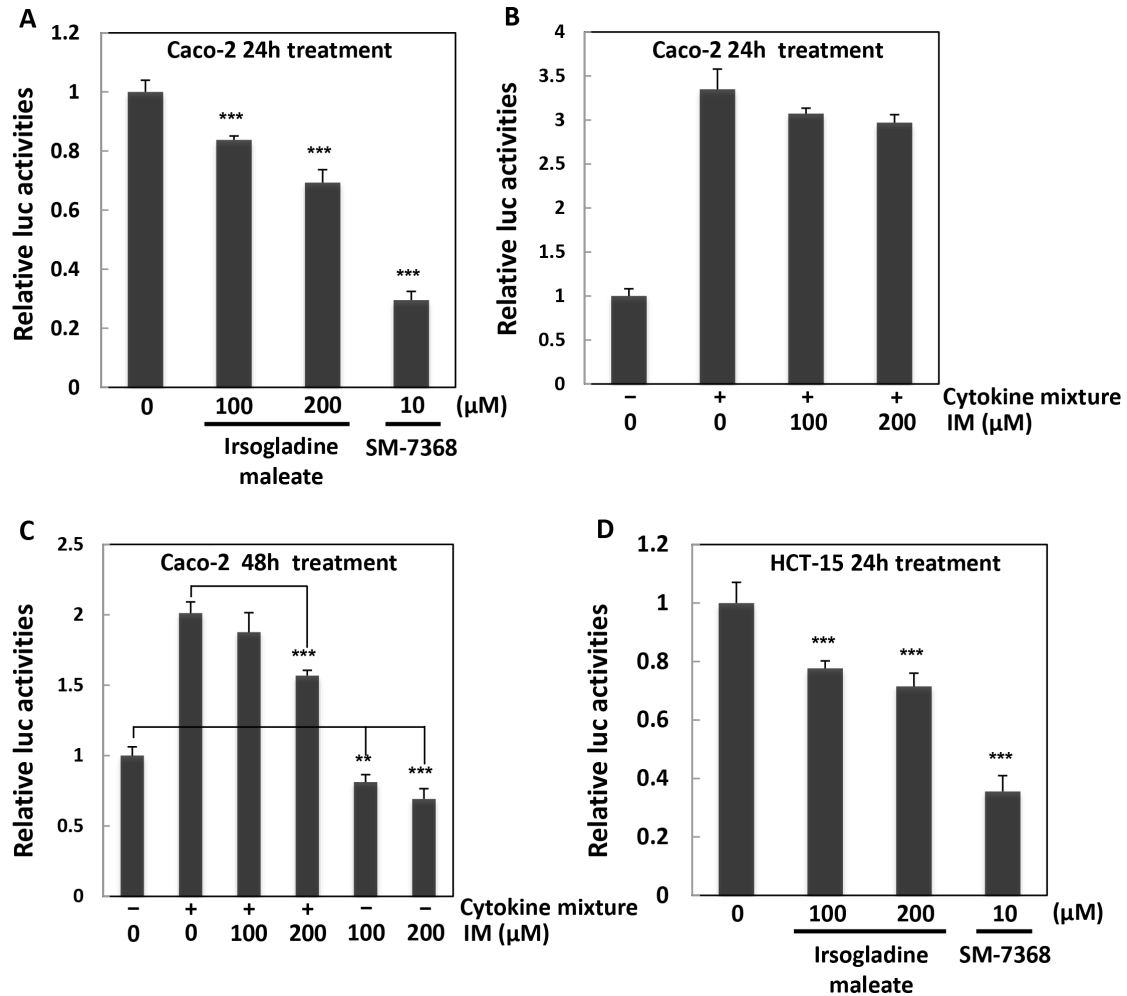
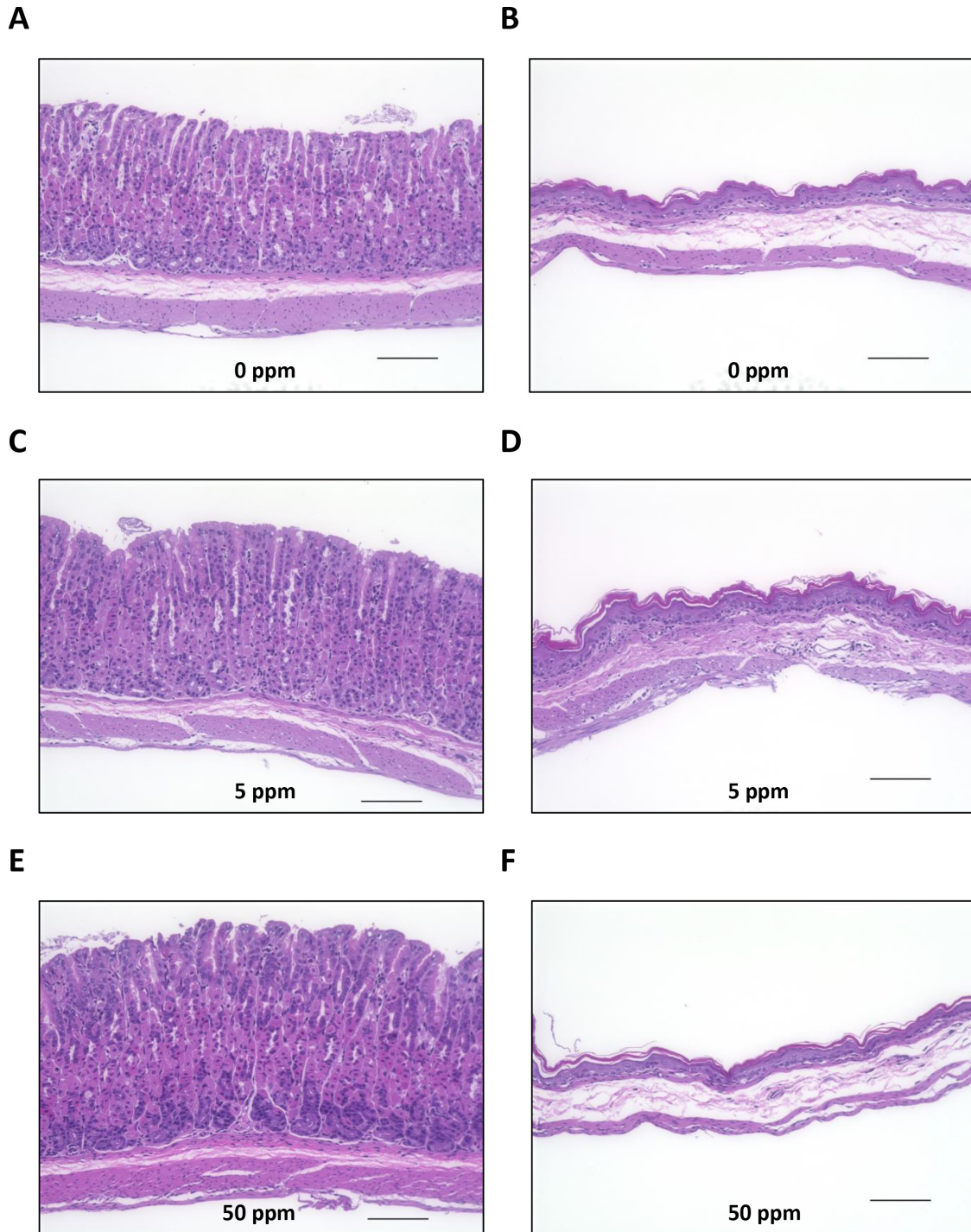


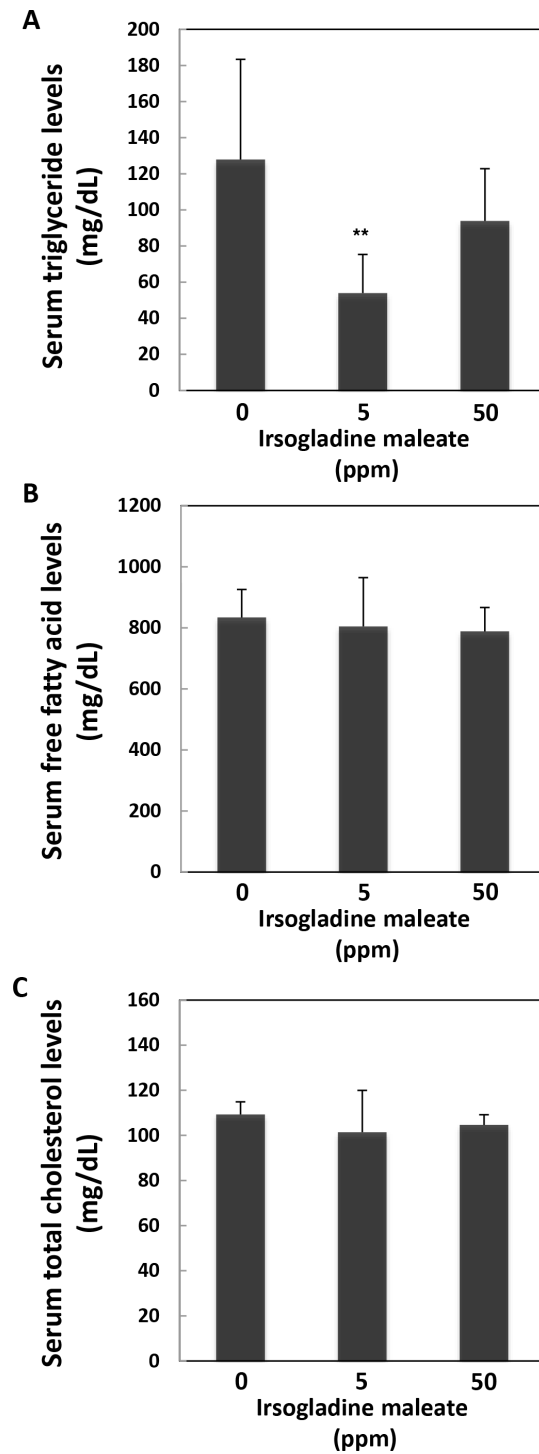
## SUPPLEMENTARY FIGURES



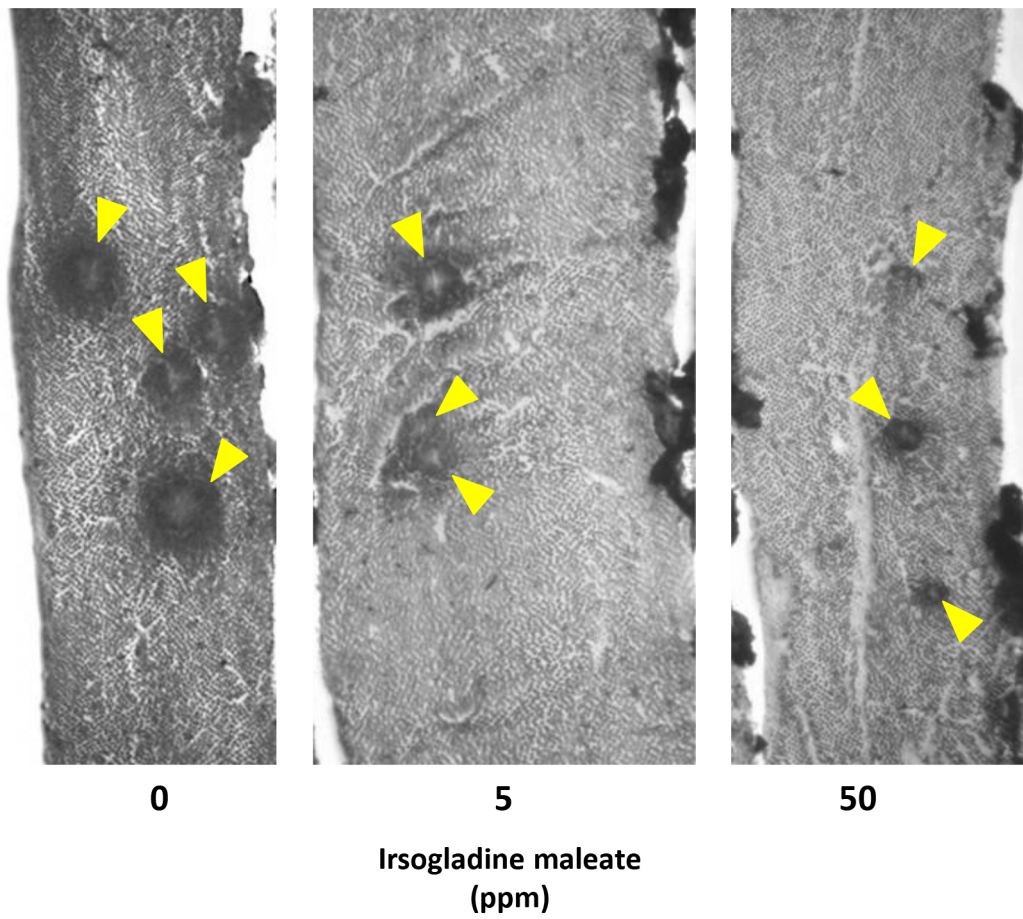
**Supplementary Figure S1: Suppression of NF- $\kappa$ B transcriptional activation by irsogladine maleate or NF- $\kappa$ B inhibitors in human colon cancer cells.** Caco-2 cells **A.** and HCT-15 cells **D.** were treated with irsogladine maleate or the NF- $\kappa$ B inhibitor SM-7368 for 24 h. Caco-2 cells were cultured in the presence of 50 ng/mL TNF $\alpha$ , 5 ng/mL IL-1 $\beta$  and 50 ng/mL EGF for 24 h **B.** and 48 h **C.** after 30 min incubation with irsogladine maleate. The basal luciferase activity of the control was set as 1.0. The data are the means  $\pm$  SD (n = 4), \*\*\* $p$  < 0.001, \*\* $p$  < 0.01 vs control. IM: irsogladine maleate.



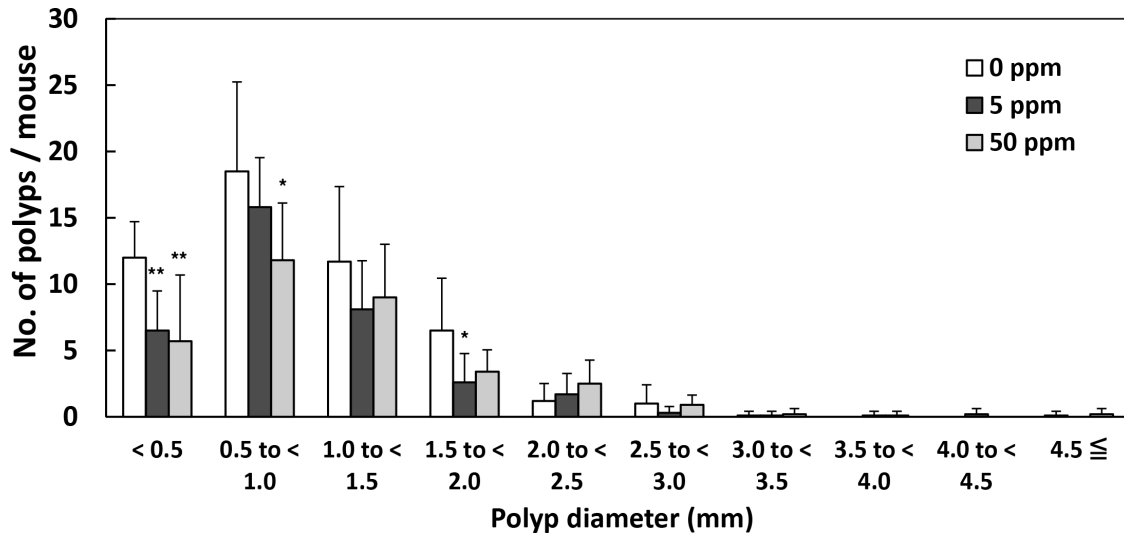
**Supplementary Figure S2: Typical microscopic views of glandular stomach of Min mice with or without irsogladine maleate treatment.** Photograph of representative H.E. staining of small glandular stomach **A, C, E** and forestomach **B, D, F** in the three groups is shown. Basal diet group (**A, B**); 5 ppm group (**C, D**); 50 ppm group, (**E, F**). Bar=100  $\mu$ m.



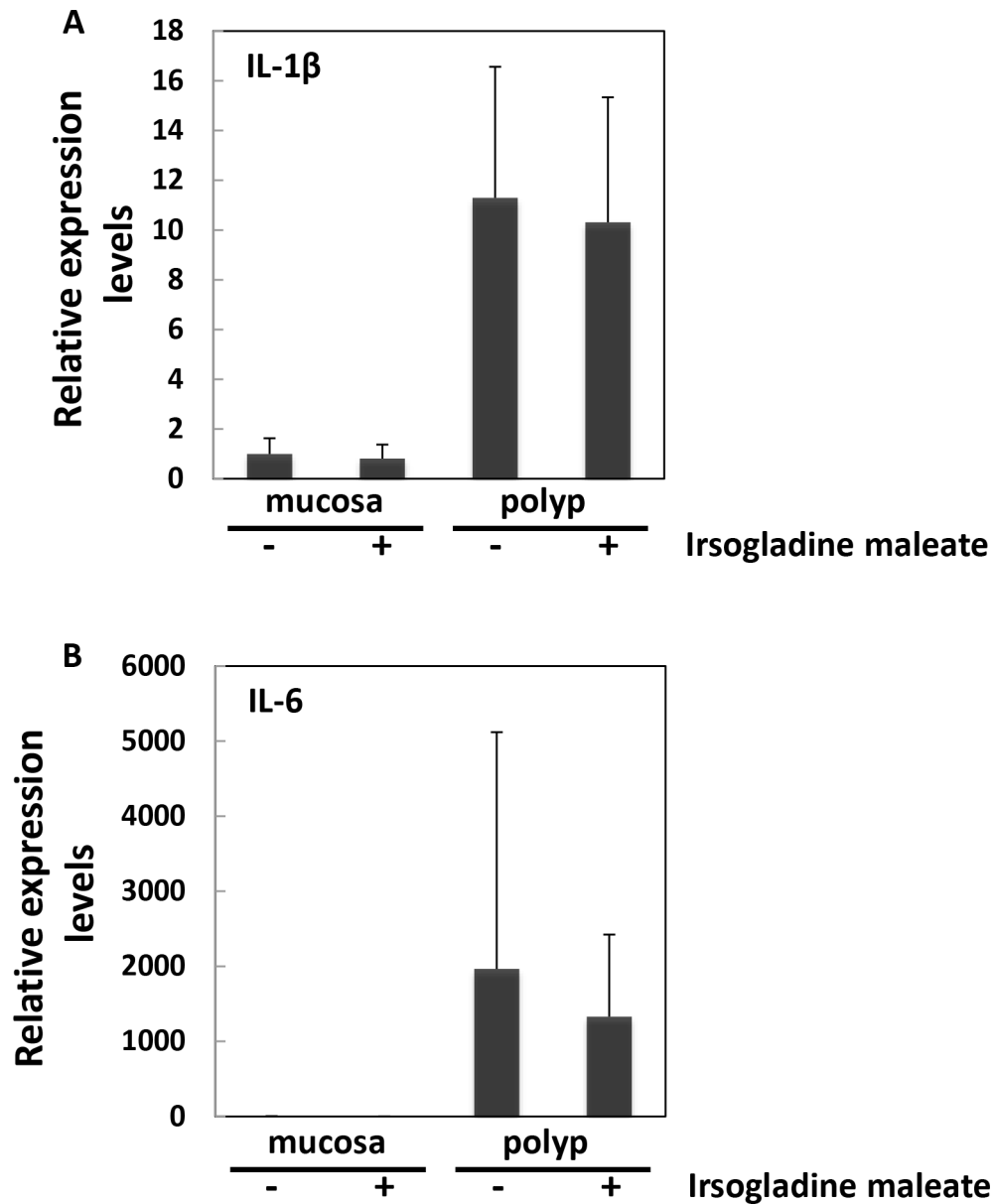
**Supplementary Figure S3: Levels of serum lipids in Min mice with or without irsogladine maleate treatment.** Serum triglyceride levels **A**, serum free fatty acid levels **B**, and serum total cholesterol levels **C**, are shown in 0, 5 and 50 ppm irsogladine maleate-treated groups. The data are the means  $\pm$  SD (n = 8),  $**p < 0.01$  vs 0 ppm.



**Supplementary Figure S4: Representative photos of small intestinal polyps in the three groups.** The polyps in the distal parts of the small intestine were photographed under a microscope. Basal diet group, left; 5 ppm group, middle; 50 ppm group, right. Arrow head indicates polyp.



**Supplementary Figure S5: Effects of irsogladine maleate on the size distribution of intestinal polyps in Min mice.** Min mice were fed a basal diet (open box) or a diet containing 5 ppm (black-filled box) or 50 ppm (gray-filled box) irsogladine maleate for 8 weeks. The number of polyps per mouse in each size class is given as the mean ± SD. \*\* $p < 0.01$ , \* $p < 0.05$  vs 0 ppm.



**Supplementary Figure S6: Suppression of the down-stream target genes of NF- $\kappa$ B in non-polyp intestinal mucosa segments and/or polyp segments of Min mice with or without 50 ppm irsogladine maleate treatment.** Quantitative real-time PCR analyses were performed to determine the IL-1 $\beta$  **A.** and IL-6 **B.** mRNA expression levels in the polyps or non-polyp intestinal mucosa of Min mice that received diets containing irsogladine maleate at doses of 50 ppm for 8 weeks. The data are normalized according to GAPDH and presented as the means  $\pm$  SD.