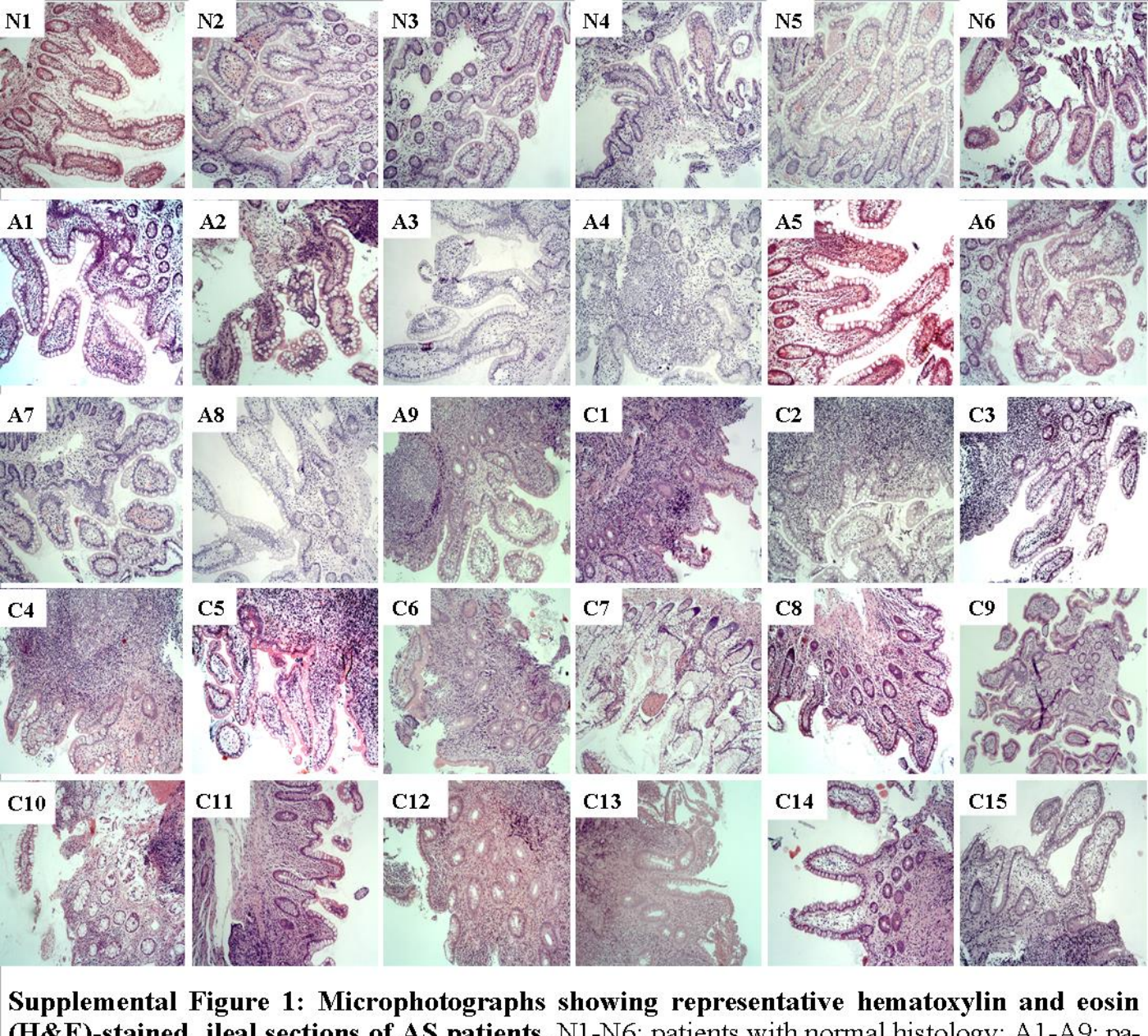
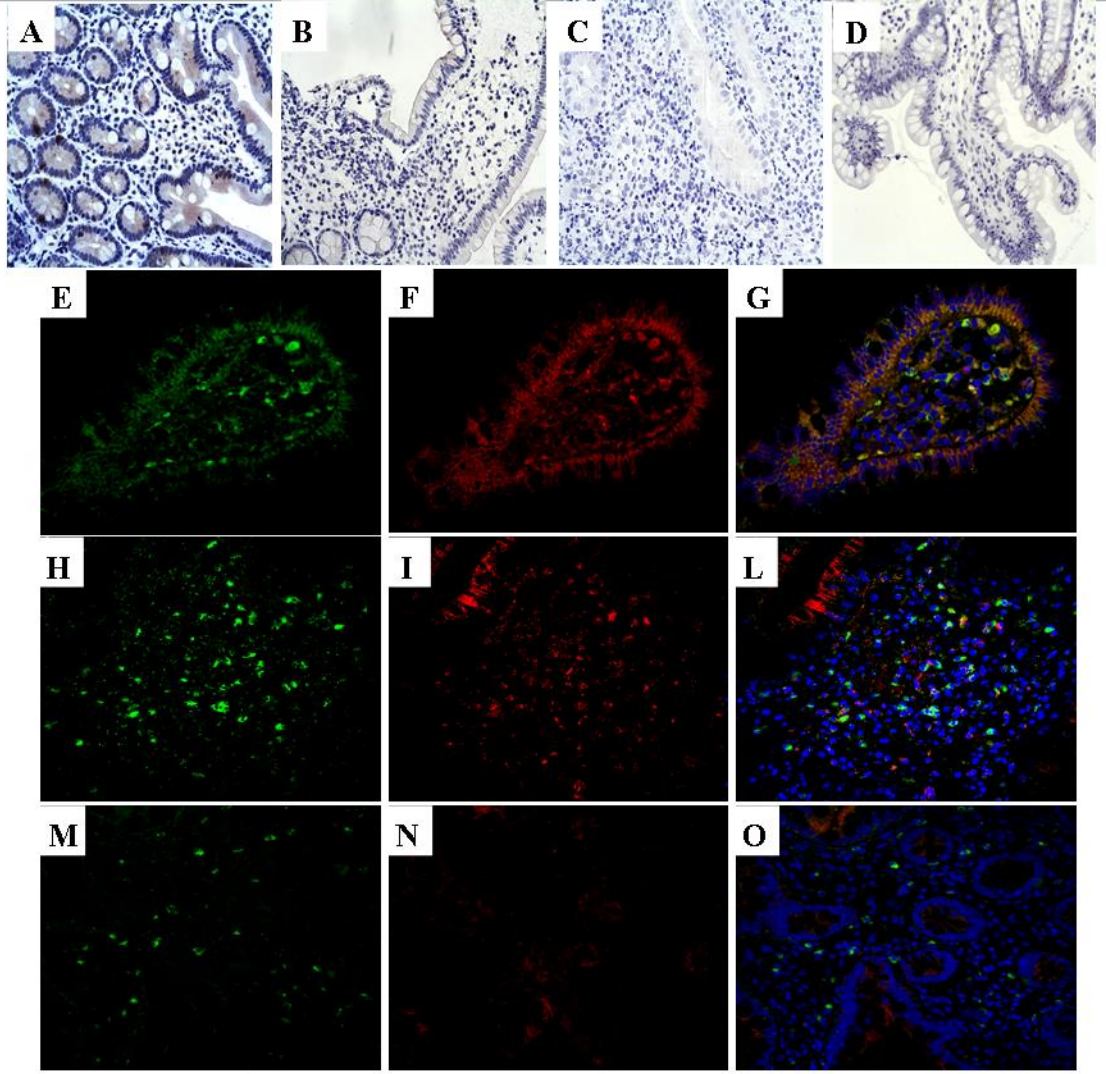
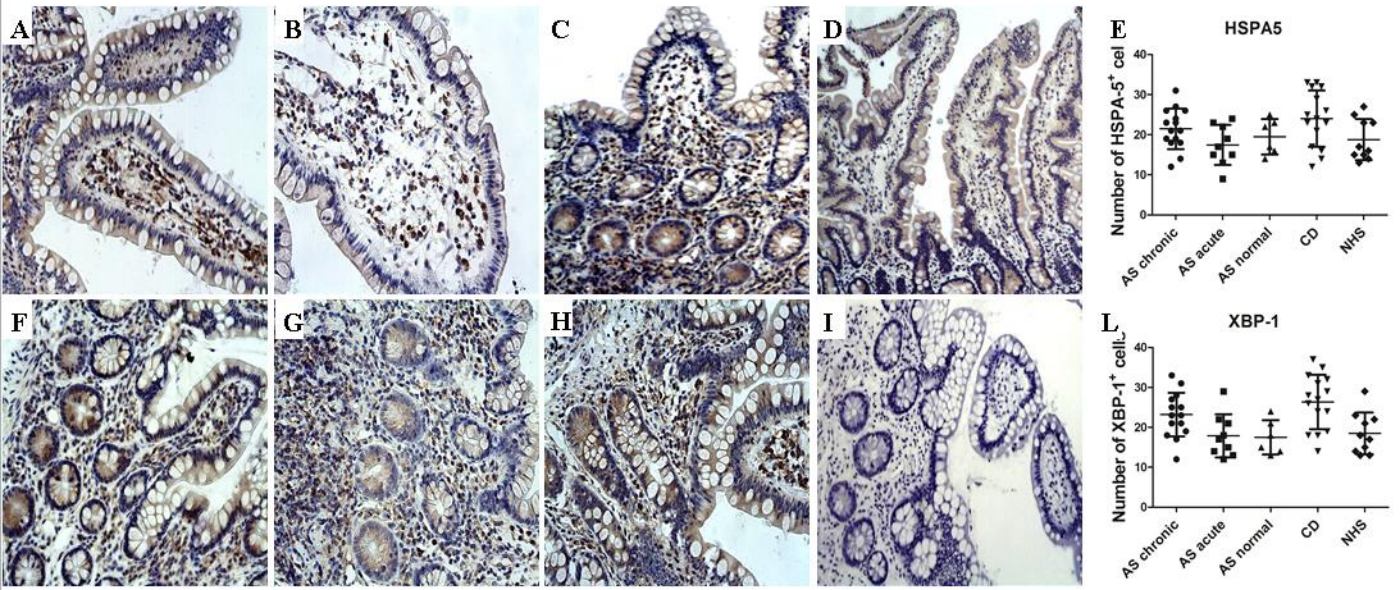



**Supplemental Figure 1: Microphotographs showing representative hematoxylin and eosin (H&E)-stained ileal sections of AS patients.** N1-N6: patients with normal histology; A1-A9: patients with acute inflammation; C1-C15: patients with chronic inflammation. Original magnification x 100




**Supplemental Figure 2.** SQSTM1 immunoreactivity in ileal biopsies of healthy controls (**A**), AS (**B**) and CD (**C**) patients; **A-C**: original magnification x250. **D**: normal ileal biopsy treated with isotype control antibody. **E-O**: Representative image of ATG5/LC3 immunostainings in the gut of AS patients with chronic gut inflammation: single staining for ATG5 (**E**) and LC3II (**F**); merged double staining for ATG5 (green) and LC3II (red) (**G**). **H-L**: representative image of ATG5/LC3 immunostainings in the gut of CD patients: single staining for ATG5 (**H**) and LC3II (**I**); merged double staining for ATG5 (green) and LC3II (red) (**L**). **M-O**: representative image of ATG5/LC3 immunostainings in the gut of healthy controls: single staining for ATG5 (**M**) and LC3II (**N**); merged double staining for ATG5 (green) and LC3II (red) (**O**).




**Supplemental Figure 3. HSPA5 and XBP-1 are not differentially regulated in the gut of AS patients and healthy subjects. A-H:** Immunohistochemical analysis of HSPA-5 (**A-D**) and XBP-1 (**F-I**) expression in ileal samples from patients and controls. Five-µm–thick paraffin embedded sections of ileal biopsies obtained from patients and controls were stained with anti-HSPA5 (**A-C**) and XBP-1 (**F-H**) antibodies. Abundant HSPA5 and XBP-1-positive cells were observed in both NCs (**A** and **F**, respectively), in AS patients (**B** and **G**, respectively) and in CD (**C** and **H**, respectively). XBP-1 positive stained cells were observed among infiltrating mononuclear cells and in some epithelial cells located in the bottom of the crypts highly resembling Paneth cells. **D** and **I**: normal ileal biopsies treated with isotype control antibodies (**A-D and F-I,** original magnification x 250). **E, L**: quantification of HSPA-5 (**E**) and XBP-1 (**L**) positive cells in the ileal mucosa from patients and controls.