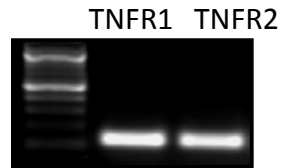
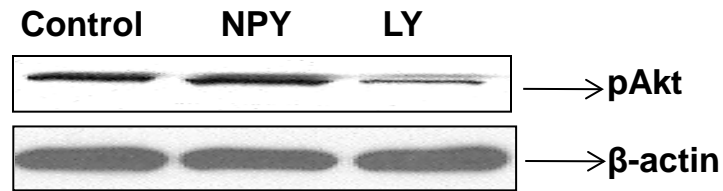


A

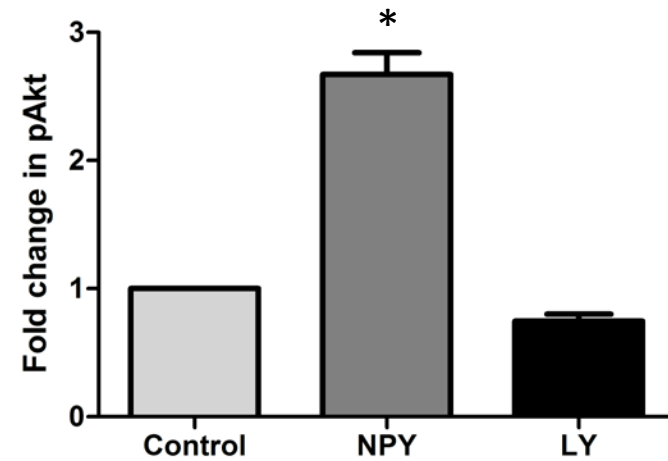


Enteric neuronal cells express TNF receptors TNFR1 and TNFR2. The enteric neuronal cell line was tested for the presence of TNF receptors R1 and R2 by PCR using respective primers.

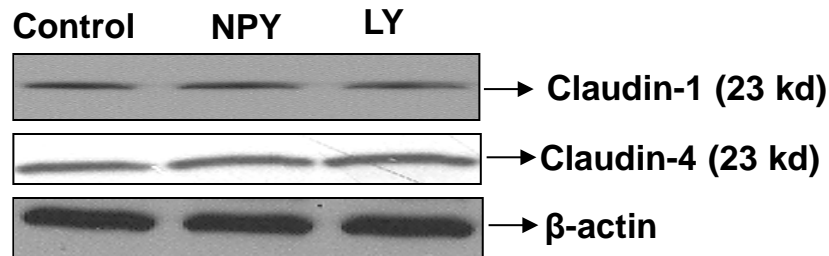
A



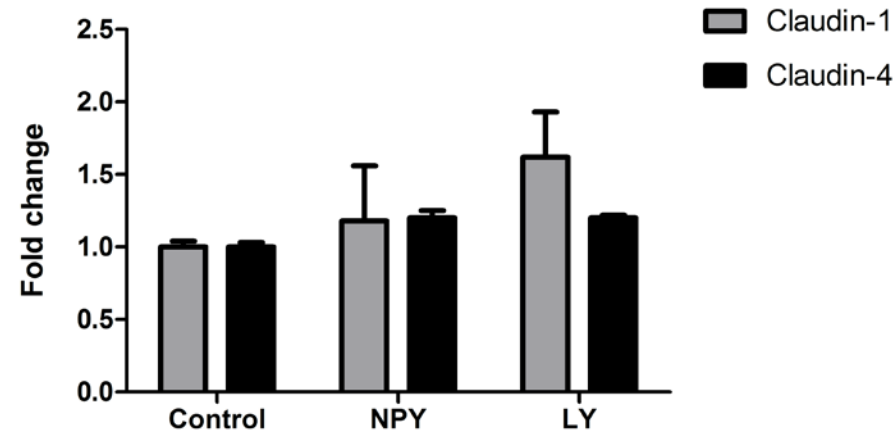
B



C

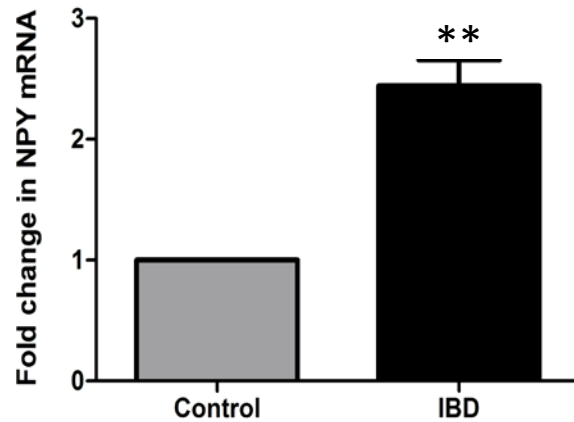


D

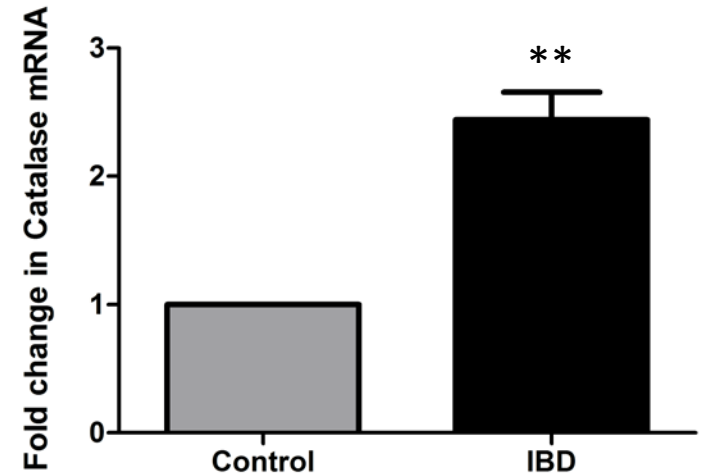


NPY increases epithelial permeability via claudin-2. Caco2-BBE or T84 cells on transwell supports were treated with NPY (0.1 μ M) in presence or absence of PI3-K inhibitor (LY-294002), and cell lysates were probed for claudins 1 and 4, or pAkt by western blotting. Scion Image analysis was used to measure band intensities and β -actin was used as loading control. **(A)** T84 cells treated with NPY showed increased Akt phosphorylation. and **(B)** claudin-1 and claudin-4 were unchanged upon NPY treatment in Caco2-BBE cells. Values are Mean \pm SEM, n = 3, * p < 0.05.

A



B



NPY and oxidative stress is upregulated in human IBD. Colonic biopsies were obtained from normal and IBD patients. The study was approved by Emory University Institutional Review Board Committee and Beth Israel Deaconess Medical Center (Boston, MA). Pre-operative medical records were reviewed for documented history of IBD. Colonic biopsies were obtained during endoscopy from patients with IBD or disease controls at Beth Israel Deaconess Medical Center, Emory University hospital, Atlanta, GA and the Atlanta VA Medical Center, Decatur, GA. These procedures were performed for polyps or malignancy. RNA was extracted from the biopsies using Qiagen Kit. NPY expression and antioxidant catalase expression was evaluated by real time PCR. Values are Mean \pm SEM, $n = 10-12$, ** $p < 0.01$.

Table 1. Sequences of mutant primers flanking the c-jun binding site for site directed mutagenesis. The sequences are represented from 5'-3' end starting from -769 to -709 bp of the mouse NPY promoter (NM_023456.2).

NPY -769 (5'-3') (Non-mutated sequence)	TCT GGG GAA TTT TGA GTC GCC ACA CTC ATG TC AGA CCC CTT AAA ACT CAG CGG TGT GAG TAC AG
Mut-#1-NPY -769	TCT GGG GAA TTT <u>CGA</u> <u>TTC</u> GCC ACA CTC ATG TC AGA CCC CTT AAA GCT AAG CGG TGT GAG TAC AG
Mut # 2-NPY -769	TCT GGG GAA TTT <u>GAA</u> <u>GCC</u> GCCACA CTC ATG TC AGA CCC CTT AAA CTT CGG CGGTGT GAG TAC AG