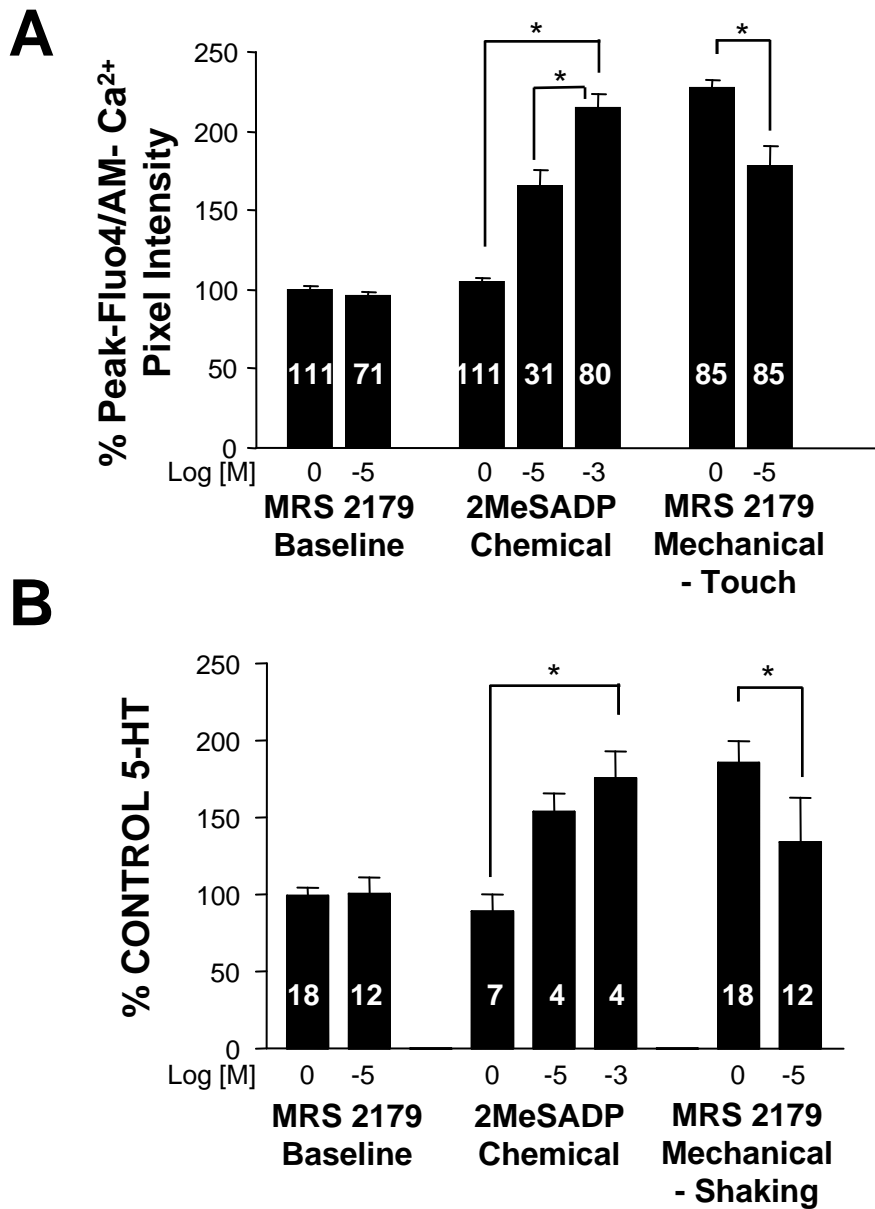
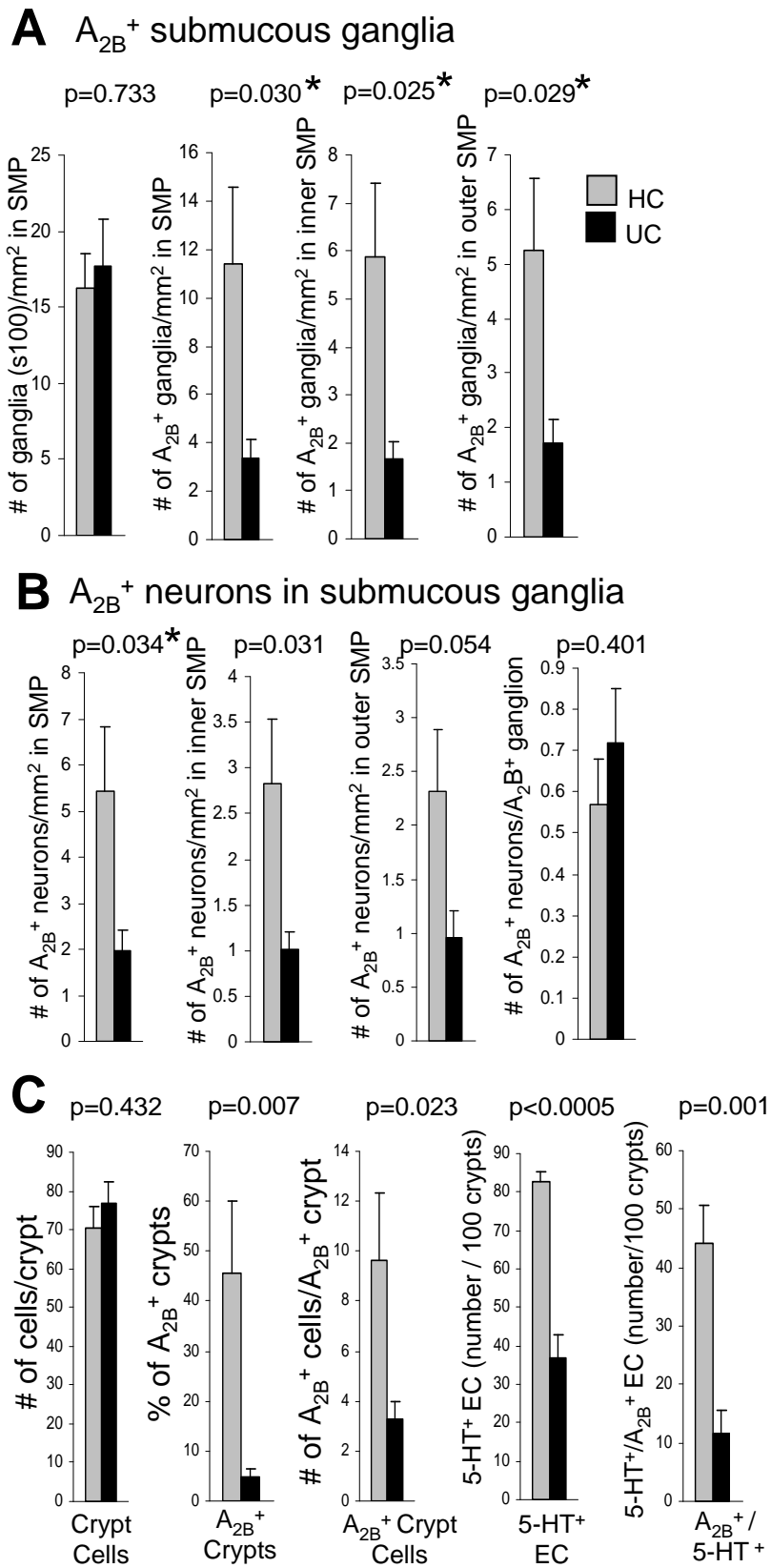


# Supplemental Figure 1



**Supplemental (Web only figure) Figure 1.** Touch Ca<sup>2+</sup> or 5-HT Release is sensitive to MRS 2179 and 2MeSADP. BON cells responded to 2MeSADP with an increase of [Ca<sup>2+</sup>]<sub>i</sub> in a concentration-dependent manner over the range of 10 $\mu$ M - 1mM (10 $\mu$ M 2MeSADP 166%; 1mM 2MeSADP 241%, p<0.05). When cells were exposed to MRS 2179 but not touched, there was no change in [Ca<sup>2+</sup>]<sub>i</sub> baseline. The touch Ca<sup>2+</sup> responses were significantly blocked by MRS 2179 (p<0.05, Supplemental Figure 1A). In BON cell monolayers a similar pattern was observed with either chemical or mechanical stimulation of 5-HT release. Both stimuli increased 5-HT release above baseline. Rotational shaking evoked 5-HT release that was sensitive to MRS 2179. The events occurring at the cellular level for Ca<sup>2+</sup> with touch parallels the responses to chemical stimulation with 2MeSADP or rotational shaking evoked 5-HT release (Supplement Figure 1B; p<0.05).

Supplemental Figure 2



**Supplemental (Web only figure) Figure 2.** A2B expression in submucous ganglia, neurons, crypt cells or hEC cells is reduced in ulcerative colitis. (A) The number of A2B+ ganglia/mm<sup>2</sup> in the submucous plexus (SMP), inner SMP or outer SMP is reduced in UC compared to controls. (B) The number of A2B+ neurons/mm<sup>2</sup> in inner SMP or outer SMP is reduced in UC. (C) The number of A2B+ crypt cells or 5-HT+ /A2B+ hEC cells is reduced in UC compared to control.