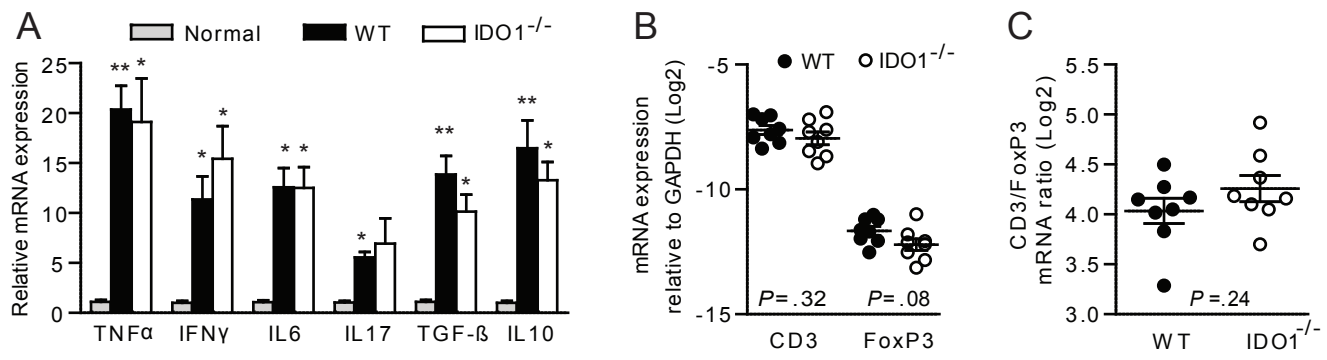
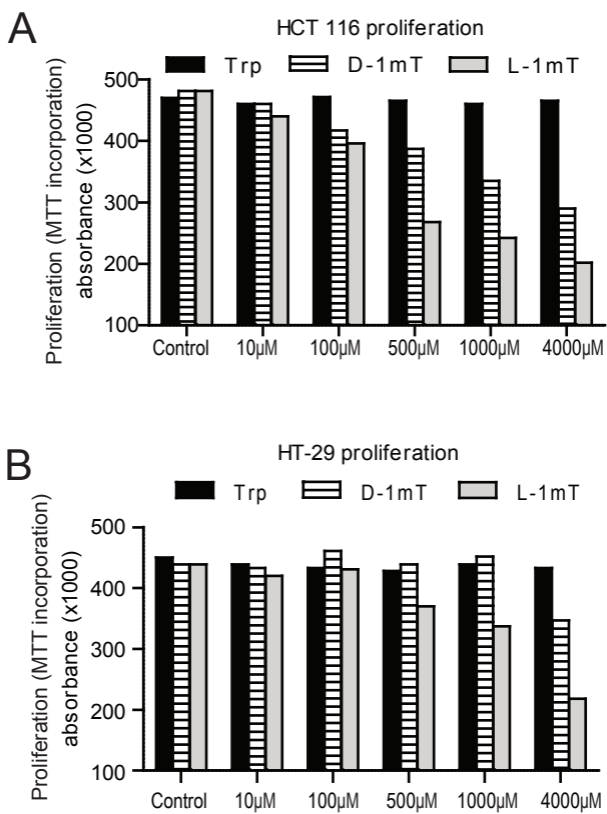


Supplementary Figure 1: Surrogate markers of colitis activity for comparator groups

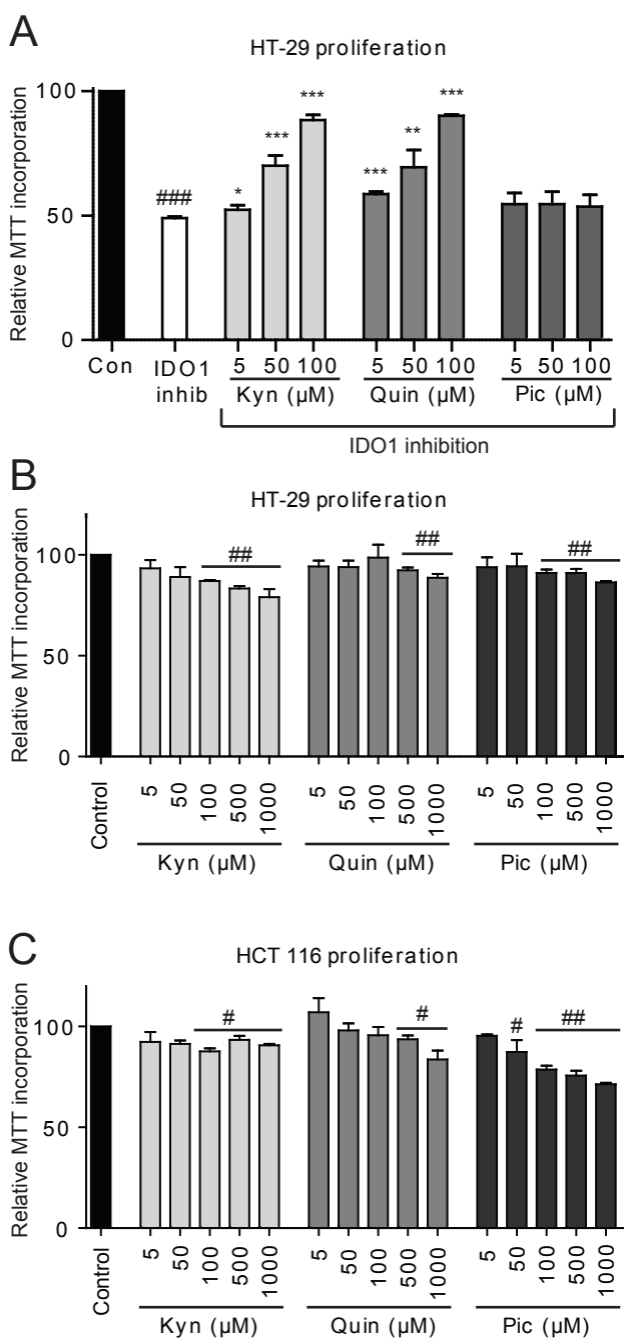


**Supplementary Figure 2:** Cytokine and T-cell profiles of WT and IDO1<sup>-/-</sup> mouse tumors.

## SUPPLEMENTARY FIGURE 3



**Supplementary Figure 3:** IDO1 inhibitors L-1mT and D-1mT exert direct concentration dependent suppression of proliferation in two human colon cancer cell lines with constitutive and inducible IDO1 expression



**Supplementary Figure 4:** IDO1 expressing colon cancer cells have increased proliferation in response to kynurenine based tryptophan catabolites when IDO1 activity is blocked.

**Supplementary Table 1: qRT-PCR primers**

<b>Gene</b>	<b>Forward Primer</b>	<b>Reverse Primer</b>
<b>Mouse Ido1</b>	CGG ACT GAG AGG ACA CAG GTT AC	ACA CAT ACG CCA TGG TGA TGT AC
<b>Human IDO1</b>	CAC TTT GCT AAA GGC GCT GTT GGA	GGT TGC CTT TCC AGC CAG ACA AAT
<b>CD3e</b>	ATG CGG TGG AAC ACT TTC TGG	GCA CGT CAA CTC TAC ACT GGT
<b>FoxP3</b>	CCC ATC CCC AGG AGT CTT G	ACC ATG ACT AGG GGC ACT GTA
<b>IL17</b>	CTC CAG AAG GCC CTC AGA CTA C	GGG TCT TCA TTG CGG TGG
<b>GAPDH</b>	TGC ACC ACC AAC TGC TTA G	GAT GCA GGG ATG ATG TTC
<b>TNF<math>\alpha</math></b>	GAC CCT CAG ACT CAG ATC ATC TTC T	CCA CTT GGT GGT TTG CTA CGA
<b>IFN<math>\gamma</math></b>	AGG CCA TCA GCA ACA ACA TAA GCG	TGG GTT GTT GAC CTC AAA CTT GGC
<b>IFN<math>\alpha</math></b>	TGC TTT CCT GAT GAC CCT GCT AGT	ATC CCA AGC AGC AGA TGA GTC CTT
<b>IL6</b>	CCA GAA ACC GCT ATG AAG TTC CT	CAC CAG CAT CAG TCC CAA GA
<b>IL10</b>	CCC TTT GCT ATG GTG TCC TT	TGG TTT CTC TTC CCA AGA CC
<b>TGF<math>\beta</math></b>	AGT GTG ACC TGG AGT TTC GGA GAT	TTG CCC TGA GGA CTT TCT TGA CCT
<b>IL1<math>\beta</math></b>	TCA GGC AGG CAG TAT CAC TCA	GGA AGG TCC ACG GGA AAG AC
<b>Axin2</b>	CAA CAC CAG GCG GAA CGA A	GCC CAA TAA GGA GTG TAA GGA CT

**Supplementary Table 1: qRT-PCR primers**

**Supplementary Figure 1:** Surrogate markers of colitis activity for comparator groups. A,B) Disease activity index (diarrhea + hematochezia). C-E) Colon length and final day stool score for comparator groups: WT vs IDO1<sup>-/-</sup>, Placebo vs L-1mT, Rag<sup>-/-</sup> and Rag<sup>-/-</sup>/IDO1<sup>-/-</sup> (DbKO) mice. (Final Stool scoring based on the following: 0-normal dry pellet; 1-moist formed pellet; 2-soft poorly formed stool; 3-diarrhea/stool present on fur) F) Colitis-associated cytokines from non-tumor distal colon tissue of WT vs IDO1<sup>-/-</sup> (n=8/group).

**Supplementary Figure 2:** Cytokine and T-cell profiles of WT and IDO1<sup>-/-</sup> mouse tumors. A) Profile of tumor cytokines relevant in colitis associated cancer compared to adjacent non-tumor tissue with all samples normalized to GAPDH. B) CD3 and FoxP3 mRNA expression in tumors relative to GAPDH. C) CD3e/FoxP3 ratio per individual tumor. n=6-8 mice/group ≥1 tumor/mouse. \**P*<.05 and \*\**P*<.01 for tumor vs non-tumor tissue. No significant difference between WT and IDO1<sup>-/-</sup> for any cytokine.

**Supplementary Figure 3:** IDO1 inhibitors L-1mT and D-1mT exert direct concentration dependent suppression of proliferation in two human colon cancer cell lines with constitutive and inducible IDO1 expression A) HCT 116 cells B) HT-29 cells. Tryptophan (as control) or 1mT added to media 24 hours after cell plating and allowed to incubate in culture x72 hours prior to MTT proliferation assay.

**Supplementary Figure 4:** IDO1 expressing colon cancer cells have increased proliferation in response to kynurenine based tryptophan catabolites when IDO1 activity is blocked. HCT 116 and HT-29 cells were treated with kynurenine metabolites in the setting of A) IDO1 blockade (500 mg L-1mT and silIDO) or B-C) constitutive IDO1 expression for a total of 48 hours. MTT incorporation assay was used to assess proliferation. \**P*<0.05, \*\**P*<0.01, \*\*\**P*<0.001 vs IDO1 inhibition state. #*P*<0.05, ## *P*<0.01 vs control.

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