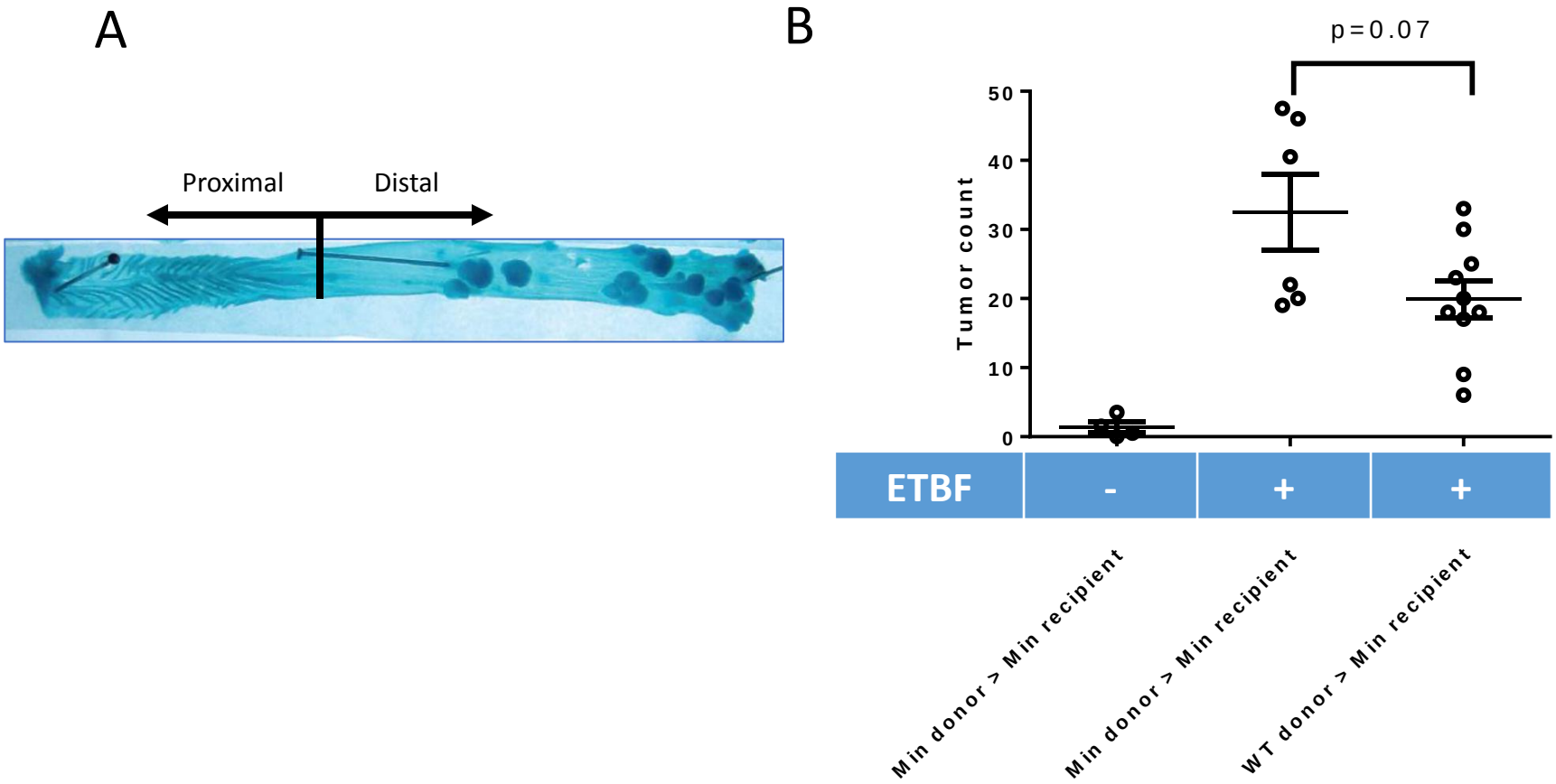

FIGURE S1. ETBF Min mouse colons.

A, ETBF-triggered tumorigenesis is prominent in distal colons of Min mice.

B, Colon tumor counts from chimeric Min mice reconstituted with bone marrow from wildtype (C57BL/6) or Min donors. Tumor numbers were assessed at 12 weeks after inoculation with ETBF.

Representative image and graph of n=2 or more independent experiments.

Figure S1

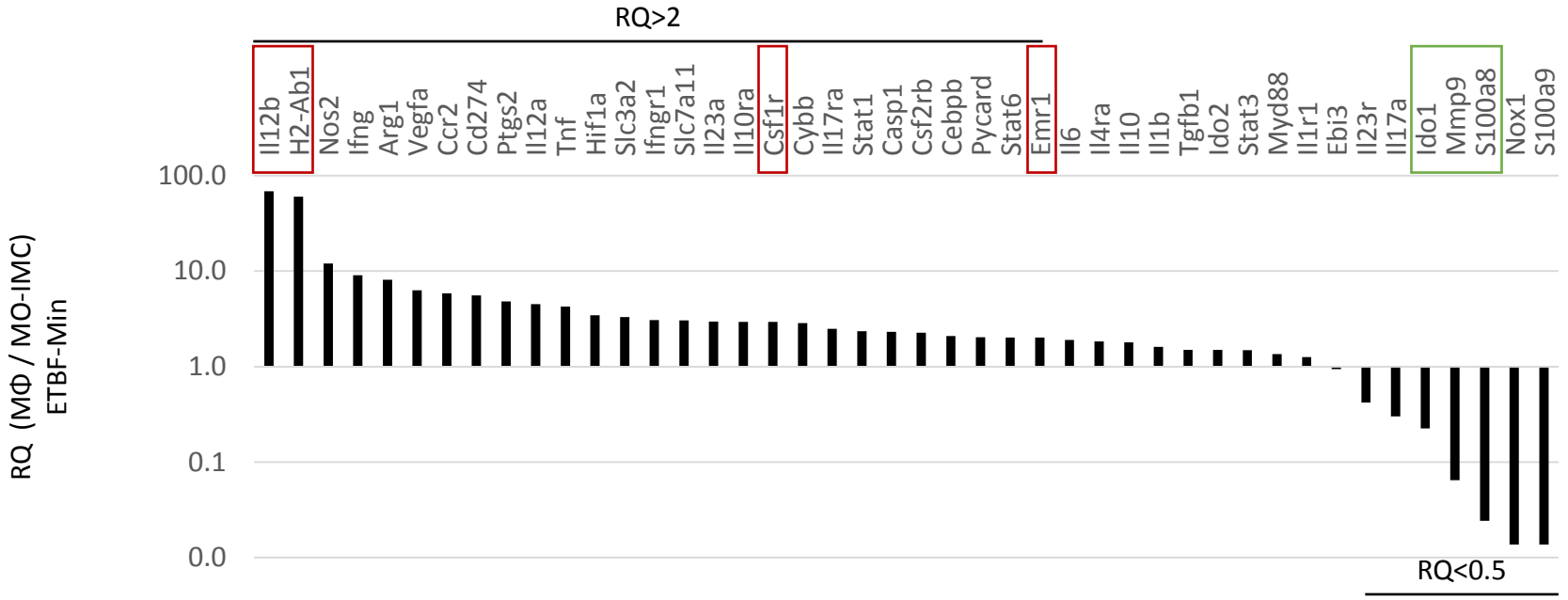

Figure S2. Gene expression analysis in ETBF tumor-infiltrating myeloid cells. MΦ and MO-IMCs were cell-sorted from 3 month ETBF Min colon tumors as $CD11b^{hi}GR1^{-}MHC^{+}F4/80^{+}$ and $CD11b^{hi}GR1^{lo}MHC^{lo}F4/80^{-}$, respectively. Bars represent fold increase of gene expression (RQ) in MΦ compared to MO-MDSCs. RQ>1, genes are overexpressed in tumor-associated macrophages; RQ<1, genes are overexpressed in MO-IMCs. Genes characterized by RQ>2 and RQ<0.5 are highlighted above and below the graph. Red boxes indicate genes characteristic of differentiated MΦ; green boxes indicate genes characteristic of MO-MDSCs. Representative graph of n=2 independent experiments.

Figure S2

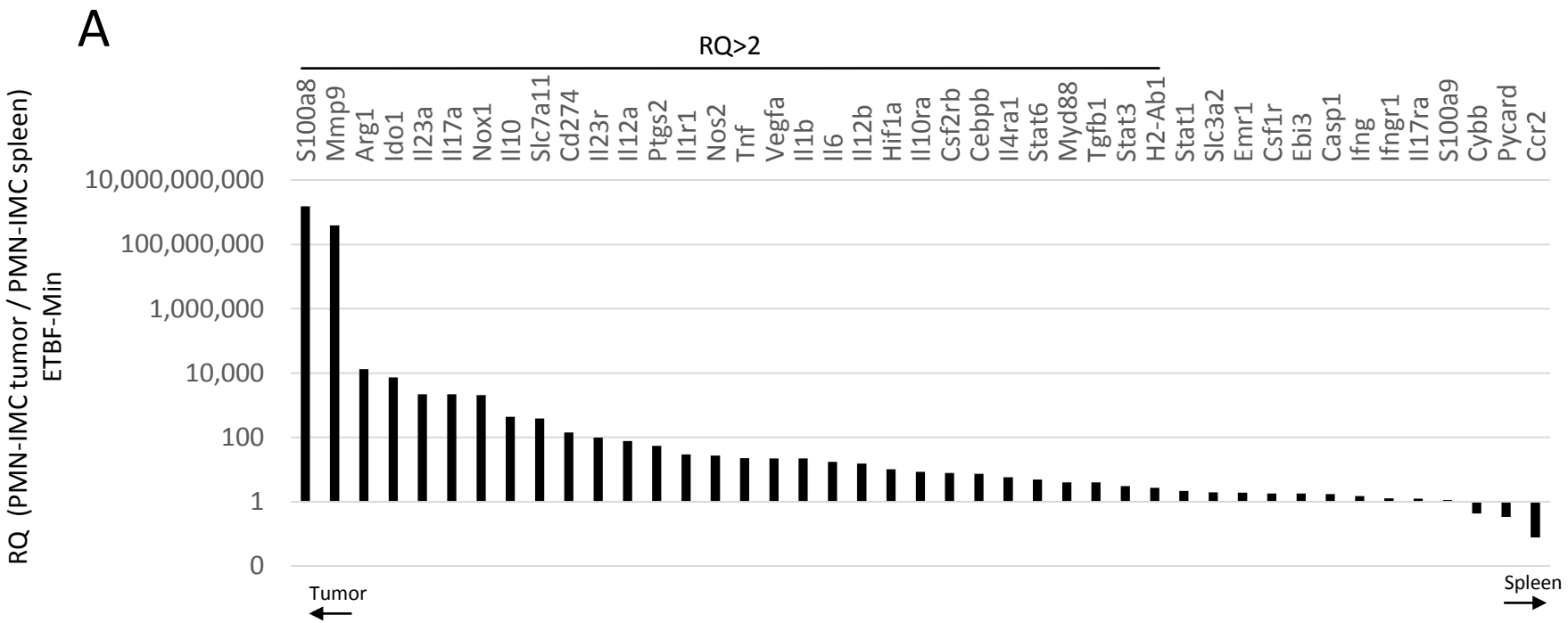

Figure S3A. Gene expression array in PMN-IMCs sorted from colon tumors or spleen of 3 month ETBF Min mice.

Bars represent fold increase of gene expression (RQ) in IMCs sorted from tumors compared to those sorted from spleen. RQ>1 when genes are overexpressed in tumor IMCs; RQ<1 when genes are overexpressed in spleen. Genes characterized by RQ>2 are highlighted. Representative graph of n=2 independent experiments.

Figure S3

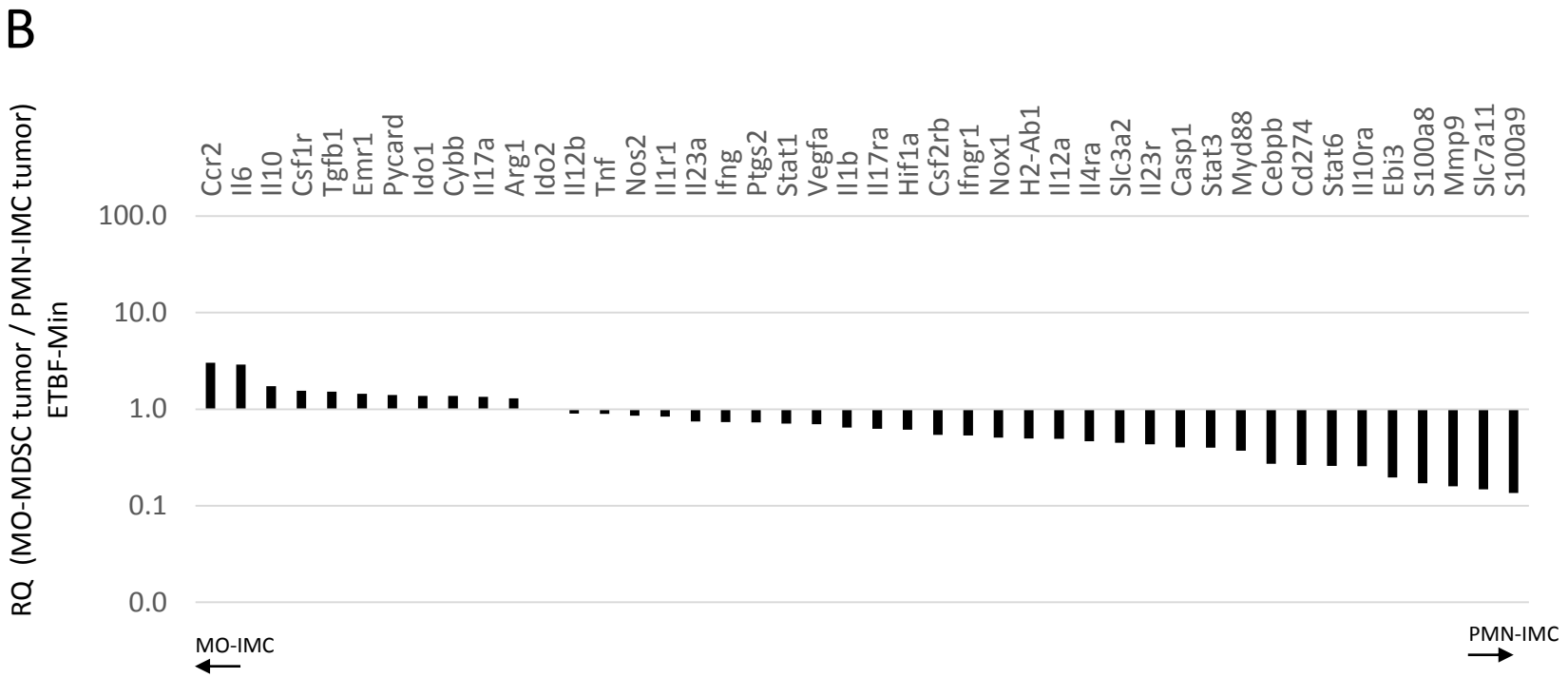

Figure S3B Same as in A, however comparing intratumoral MO-MDSCs to PMN-IMCs of 3 month ETBF Min mice. Representative graph of n=2 independent experiments.

Figure S3

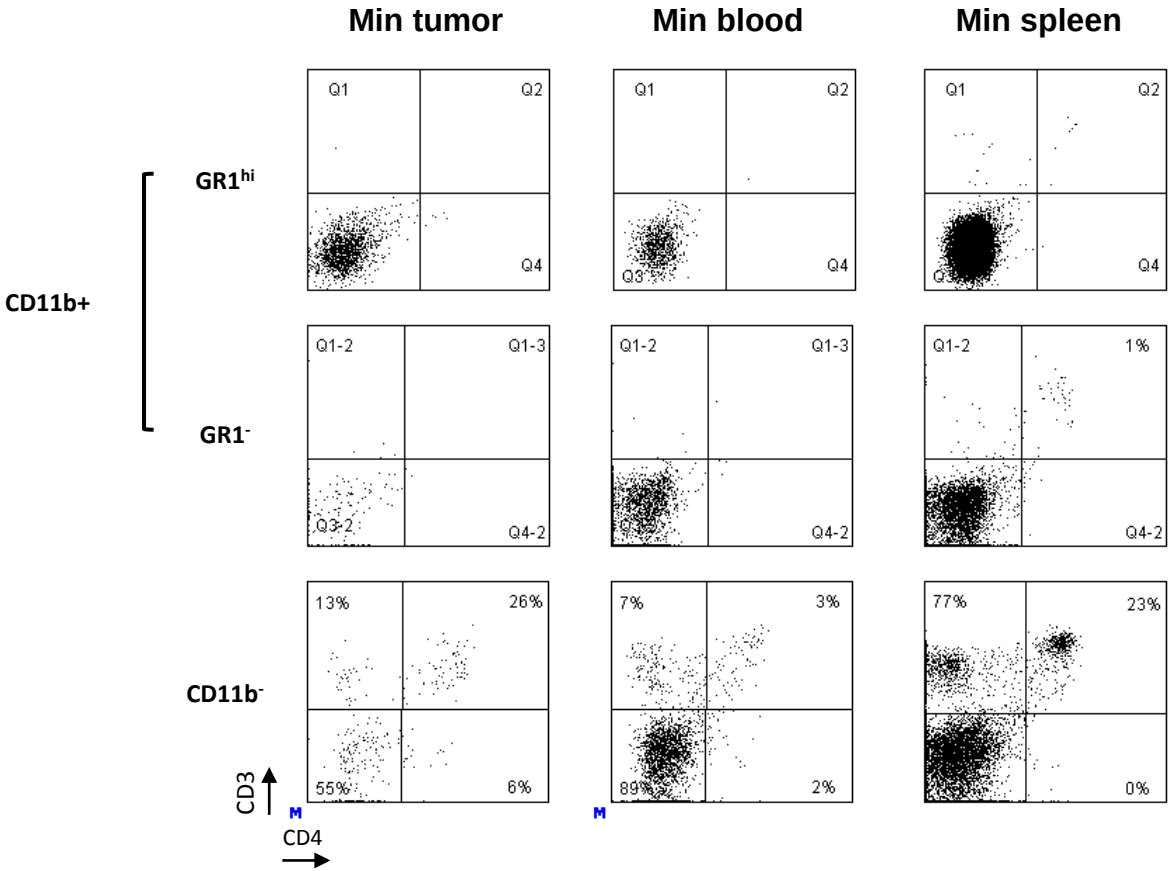

Figure S4. Myeloid cell populations ($CD11b^{+}GR1^{hi}$ and $CD11b^{+}GR1^{neg}$) cell-sorted from colon tumors for IL-17 qPCR were not contaminated by T cells.

Plots represent pre-sort CD3 and CD4 staining in $CD11b^{+}GR1^{hi}$, $CD11b^{+}GR1^{neg}$ and $CD11b^{-}$ gates used for cell sorting and subsequent *Il17a* mRNA detection in myeloid cells associated with colon tumors, blood or spleen of 3 month ETBF-colonized Min mice. Representative staining of n=2 independent samples from one cell sorting experiment.

Figure S4

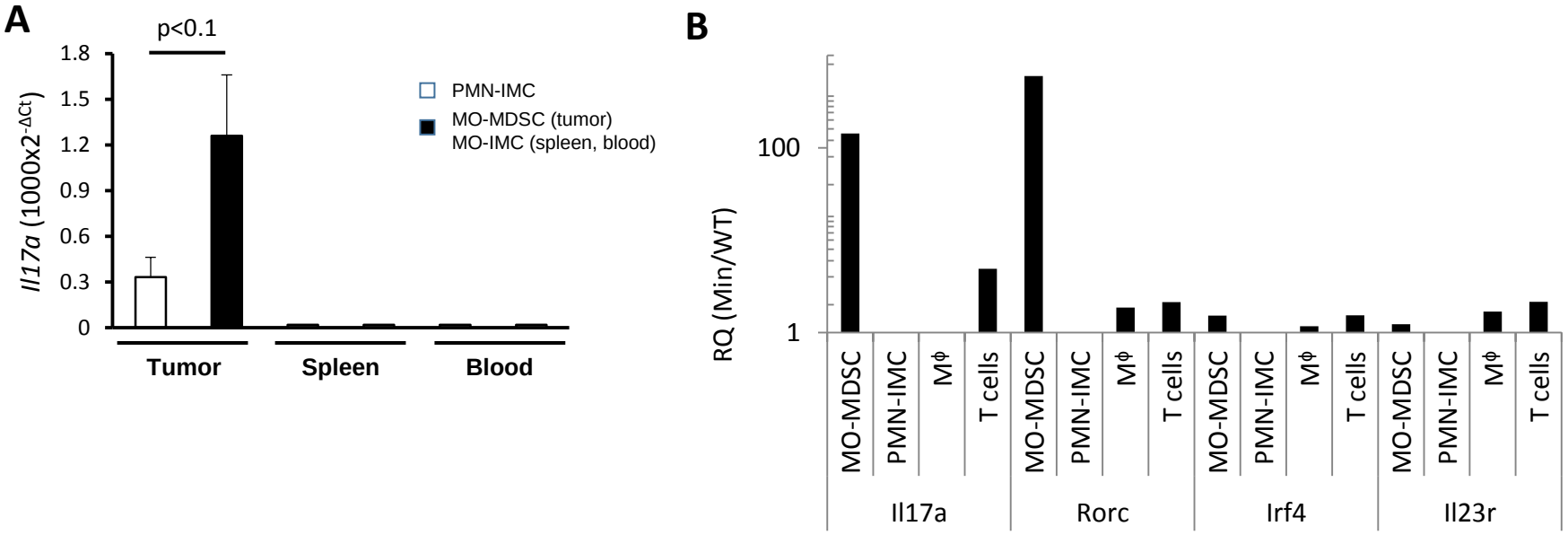

Figure S5. Tumor-infiltrating MDSCs express *Il17a* gene in colon tumors.

A, PMN-IMCs and MO-MDSCs or MO-IMCs were sorted from tumors, spleen or blood of 3 month ETBF-colonized Min mice. RNA extracted from each cell subset was assessed by qPCR for *Il17a* gene expression. Mean ± SEM is shown. Ct values were normalized with Ct_{Gapdh} ($\Delta Ct = Ct - Ct_{Gapdh}$) and bars represent $2^{-\Delta Ct}$. Aggregate data of n=2 independent experiments.

B, Myeloid and lymphoid populations were cell-sorted from C57BL/6 (WT) or Min distal colon lamina propria at day 7 post-ETBF colonization and assessed for *Il17a, Rorc, Irf4* and *Il23r* expression by qPCR. Bars represent fold increased (RQ) between Min and wild type cell populations, $RQ = 2^{-\Delta\Delta Ct}$. Representative staining of n=2 independent samples from one cell sorting experiment.

Figure S5

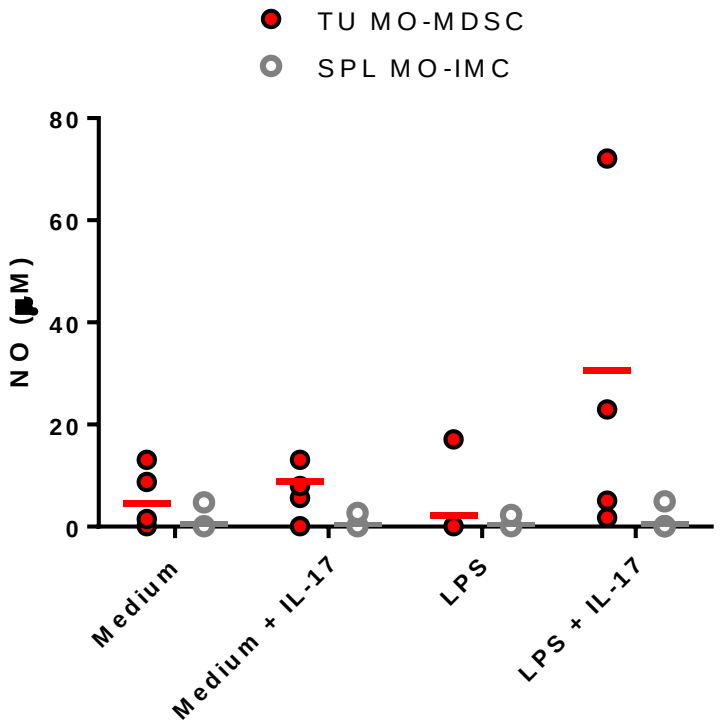

Figure S6. Confirmation of Nos2 gene expression by detection of nitric oxide in culture supernatant of rIL-17-conditioned purified MO-MDSC.
MO-MDSCs cell-sorted from colon tumors or MO-IMCs sorted from spleen in ETBF Min mice were incubated overnight with IL-17 (10 ng/ml) in presence or absence of LPS (100ng/ml). Nitric oxide (NO) was measured in culture supernatants using a colorimetric assay. Lines represent geometric mean. Aggregate data from n=3-4 independent experiments.

Figure S6

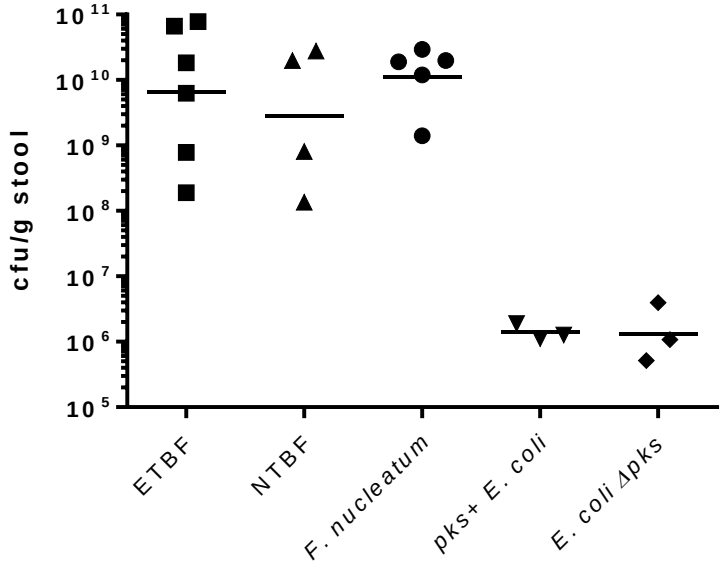

Figure S7. Stool culture of oncogenic bacteria to confirm colonization.
Fresh stool samples were collected 7 days after inoculation with *F. nucleatum*, pks^{+} *E. coli*, *E. coli* ΔPKS, ETBF or NTBF. Samples were homogenized in PBS, serially diluted and cultured on Brucella (*F. nucleatum)*, BHI (ETBF, NTBF) or MacConkey (*E. coli*) agar under optimal anaerobic or aerobic conditions. Colony forming units were manually counted within 24-48h of culturing.

Figure S7

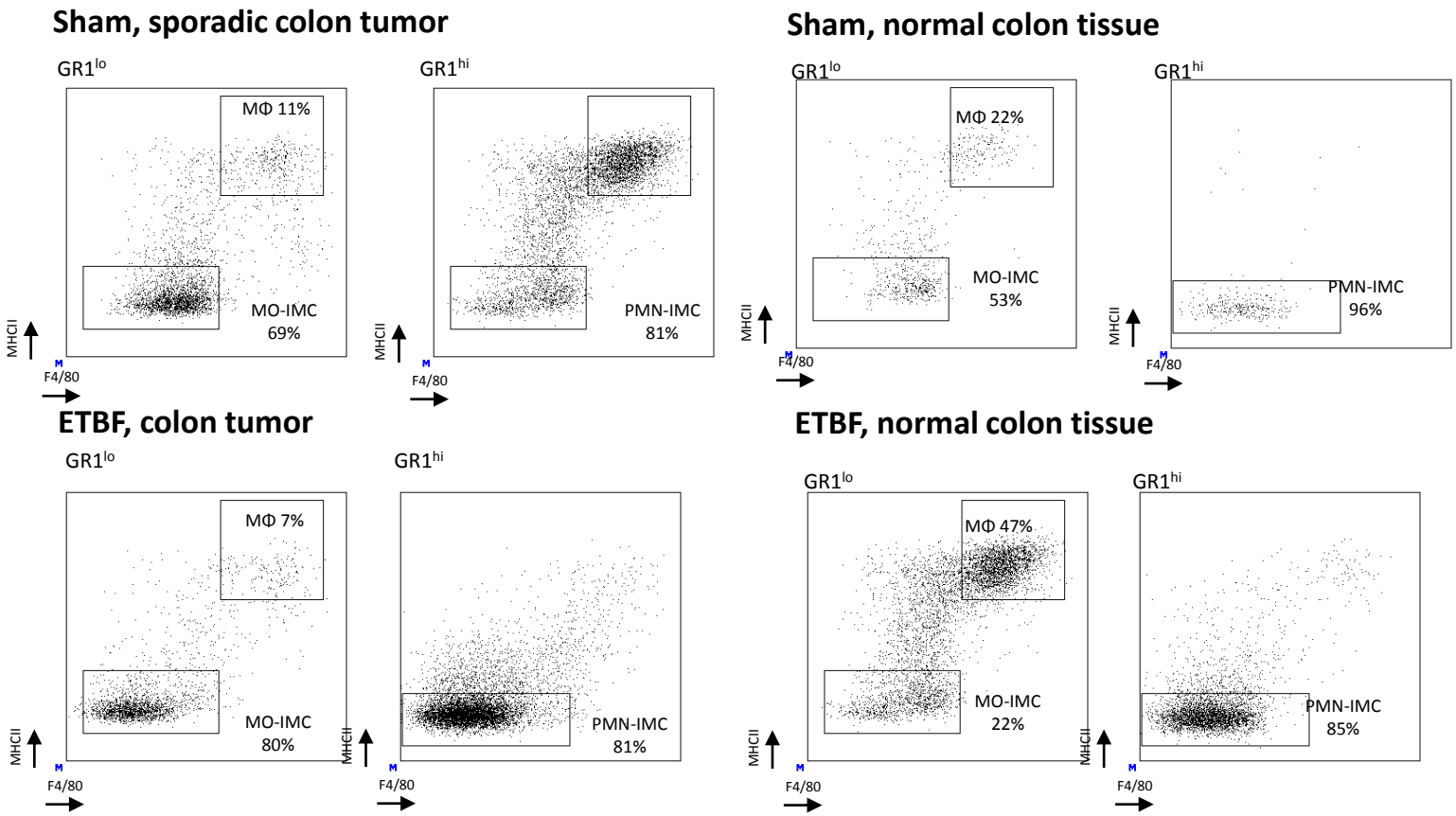

Figure S8. Additional representative flow plots of MO-IMC, PMN-IMC and Mφ subsets in sporadically occurring or ETBF-triggered colon tumors, as well as normal colon tissue. As described in Fig. 3A, 3B.

Figure S8

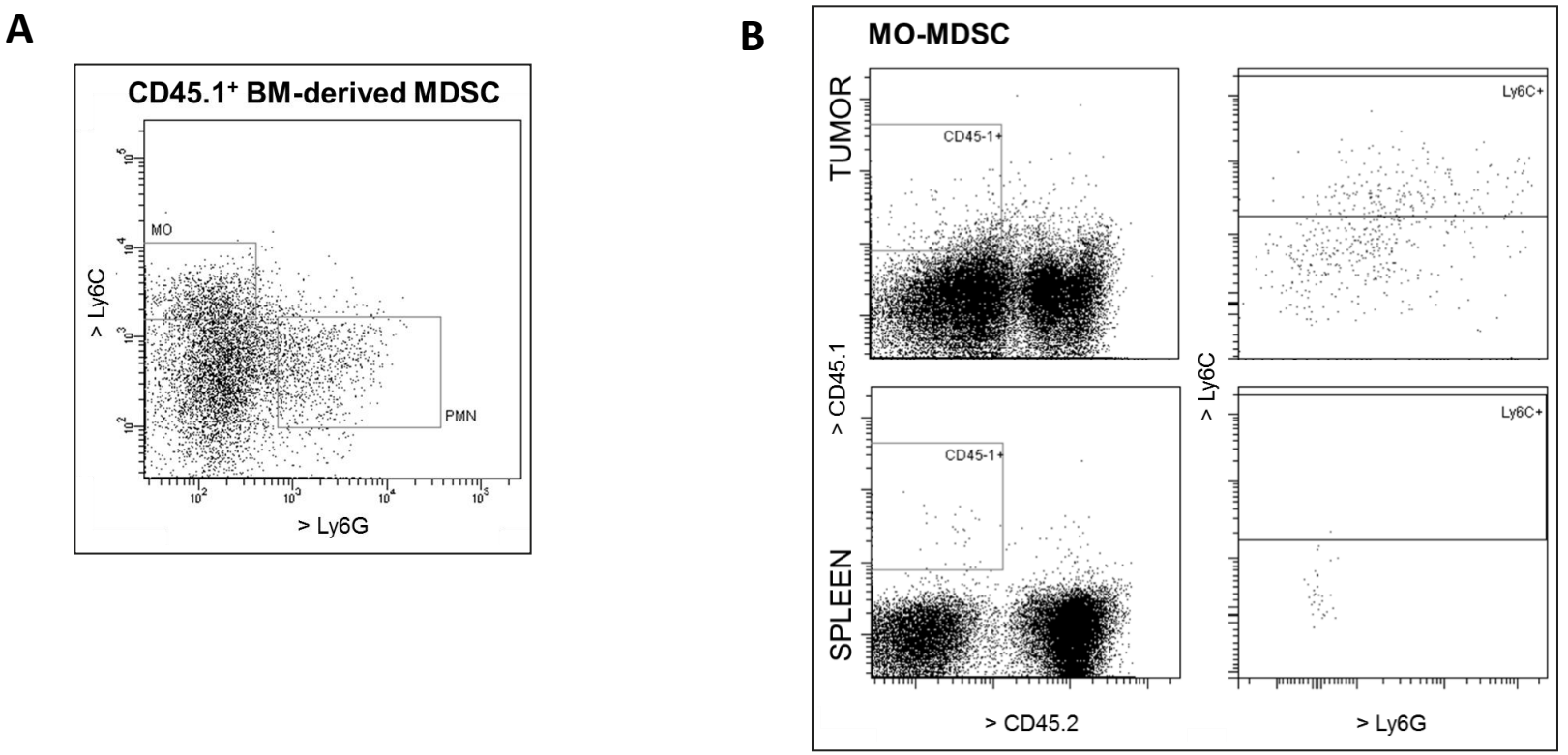

Figure S9. Gating strategy for the recovery of adoptively-transferred *in vitro* derived BM-MDSC.

A, CD45.1$^+$ bone marrow cells were harvested and MDSCs were derived in vitro by culture with G-CSF, GM-CSF and IL-13 for 5 days. MO-MDSCs were cell-sorted and adoptively transferred to Min recipients previously infected with ETBF (ETBF 11 weeks) via tail-vein injection.

B, Colon tumors were harvested 1 week later (ETBF 12 weeks) and CD45.1$^+$ were recovered and sorted by FACS for RNA extraction and Arg1/Nos2 qPCR analysis.

Figure S9