## **1** Supplemental Material









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**Supplemental Figure S2.** A) Average tumor growth curves of PyMT TK<sup>FL/FL</sup> CSF1R-Cre<sup>+</sup> (n=10) 8 mice with tamoxifen (Tamo) treatment and PvMT TK<sup> $\Delta$ Myeloid</sup> (n=27) mice. Tamoxifen treatment was 9 initiated when tumors reached 100mm<sup>3</sup> (denoted by the dashed line). **B)** Average tumor growth 10 11 curves of PyMT WT (n=27) and PyMT WT + BMS-777607 (n=5) mice. Statistical significance was 12 determined using a two-way ANOVA with corrected multiple t tests. Data represent average values ± SD. \*P<0.05. Chemical inhibition of RON in PyMT TK<sup>+/+</sup> mice was performed with 50 13 14 mg/kg/day BMS-777607 (Selleck Chemical) treatment via oral gauge, starting at 8 weeks of age 15 (when palpable tumors reach a measurable size).



Dio-labelled tumor cell (R7) based BrdU gating strategy for co-cultures

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Supplemental Figure S3. Representative flow cytometry gating strategies for tumor cell/macrophage co-culture. Using Dio fluorescent labeling of tumor cells prior to macrophage co-

culture, tumor cells were resolved from the mixed culture by gating on Dio fluorescence to
examine A) tumor cell proliferation via BrdU incorporation and B) tumor cell apoptosis/cell death
via Annexin V/PI expression.



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25 **Supplemental Figure S4. A)** Representative Western blot images showing the immunoprecipitation of p35, EBI3, p40, and p28 in TK<sup>+/+</sup> BMDM CM with (+) and without (-) 26 27 antibody depletion (n=3). Depletion of p35, EBI3, p40, and p28 subunits from TK<sup>+/+</sup> BMDM CM 28 was performed by rotating BMDM conditioned media with 1µg/ml antibody and protein A/G 29 agarose beads (SCBT). Following incubations with antibody and beads, the depleted CM was 30 used for treatment. Western blot shown using proteins eluted from beads. Incubation with beads 31 without antibody served as the control. B) Representative Western blot images showing p35, p40, and EBI3 expression from concentrated TK<sup>+/+</sup> CM that was depleted for EBI3, p35, or p40. CM 32 33 samples were concentrated (approximately 10 fold) using Amicon Ultra-4 Ultracel 3K Centrifugal filters (Millipore Sigma) as per manufacturer's recommendations. C) Representative Western blot 34

- images of pulled down target protein showing p35, p40, and EBI3 levels following primary IP pull
- 36 down and a second sequential IP pull down in respective lanes.

## 39 Supplemental Table S1. Primers for Genotyping

	Gene	Primers
Genotyping	PyMT	5'-GGAAGCAAGTACTTCACAAGGG-3'
		5'-GGAAAGTCACTAGGAGCAGGG-3'
	Ron Flox	5'-TCATTTGAATCAGTCCCCTCACTTTTCTCC-3'
		5'-GGAACCAGTACACAGATGAGTAAACTGAGC-3'
		5'-TCGCTCAAGCCCAGGCAGGGCCTCACAGAG-3'
	Lys-Cre	5'-TTACAGTCGGCCAGGCTGAC-3'
	-	5'-CTTGGGCTGCCAGAATTTCTC-3'
		5'-CCCAGAAATGCCAGATTACG-3'
	CSF1R-Cre	5'-AGATGCCAGGACATCAGGAACCTG-3'
		5'-ATCAGCCACACCAGACACAGAGATC-3'

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## 44 **RNA-Sequencing (RNA-Seq)**

45 RNA-Seg analysis was performed in GeneSpring NGS software (Agilent Technologies). First, 46 sequences were aligned to the mouse reference genome (mm9), which aligns reads spanning 47 known or novel splice junctions. The reference annotations were produced by the Ensembl 48 project1. Multiple mapping reads were removed and aligned reads were filtered on base quality, 49 with a quality threshold >=30 and zero 'Ns' allowed in each read. The aligned gene read counts 50 were quantified and used to compute reads per kilobase per million reads (RPKMs) for each 51 transcript in each sample. Raw counts were normalized using the DESeq algorithm, threshold set to 1, and base lined to the median of control samples. Further filtration was applied, requiring at 52 53 least 3 RPKM in each sample of at least one experimental condition, yielding 13,949 transcripts.

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