

Supplementary Material for

**Combination Therapy of TGF- $\beta$  Blockade and Commensal-derived  
Probiotics Provides Enhanced Antitumor Immune Response and  
Tumor Suppression**

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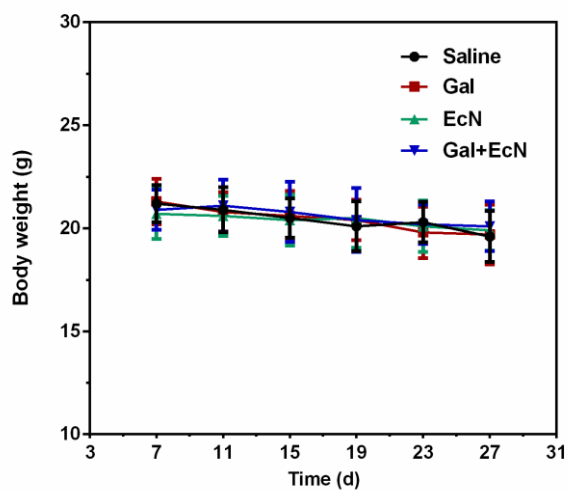
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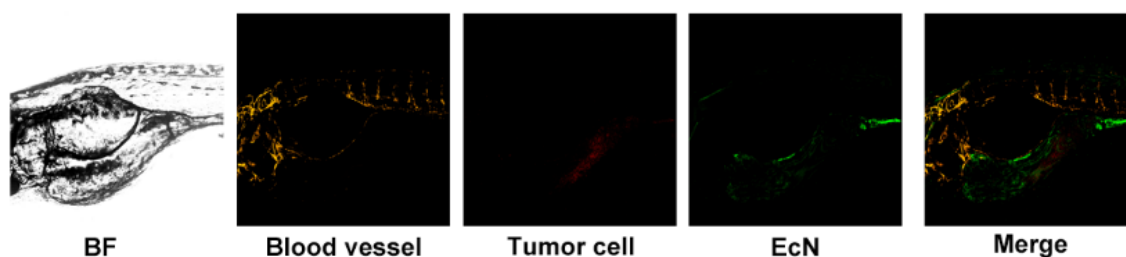
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#These authors contributed equally to this work.

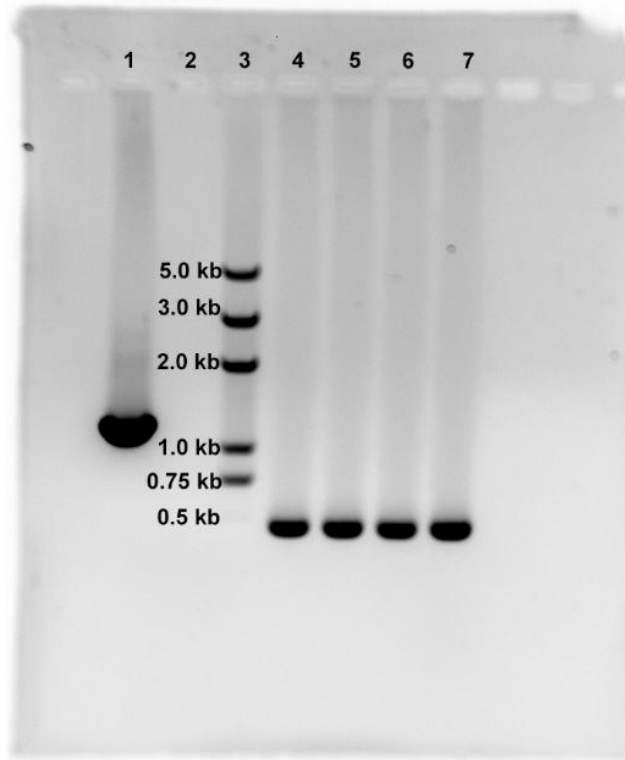
## Supplementary Material



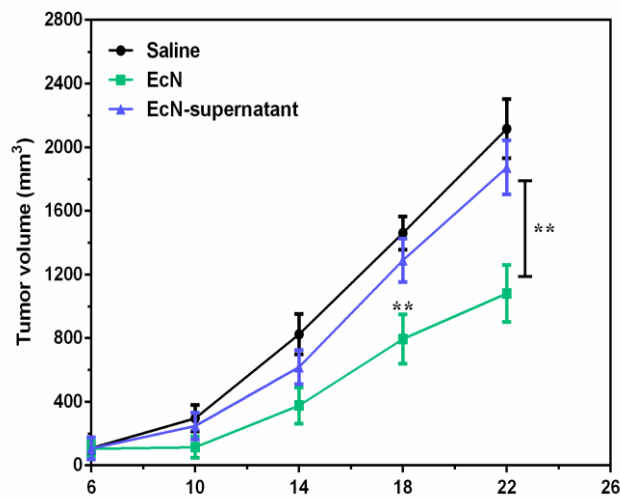
**Figure S1.** Body weight changes of H22 or 4T1 tumor bearing mice with different treatments. Data are representative of two independent experiments. All data are shown as mean  $\pm$  SD. ( $n = 6$ , \*  $P < 0.05$ , \*\*  $P < 0.01$ )



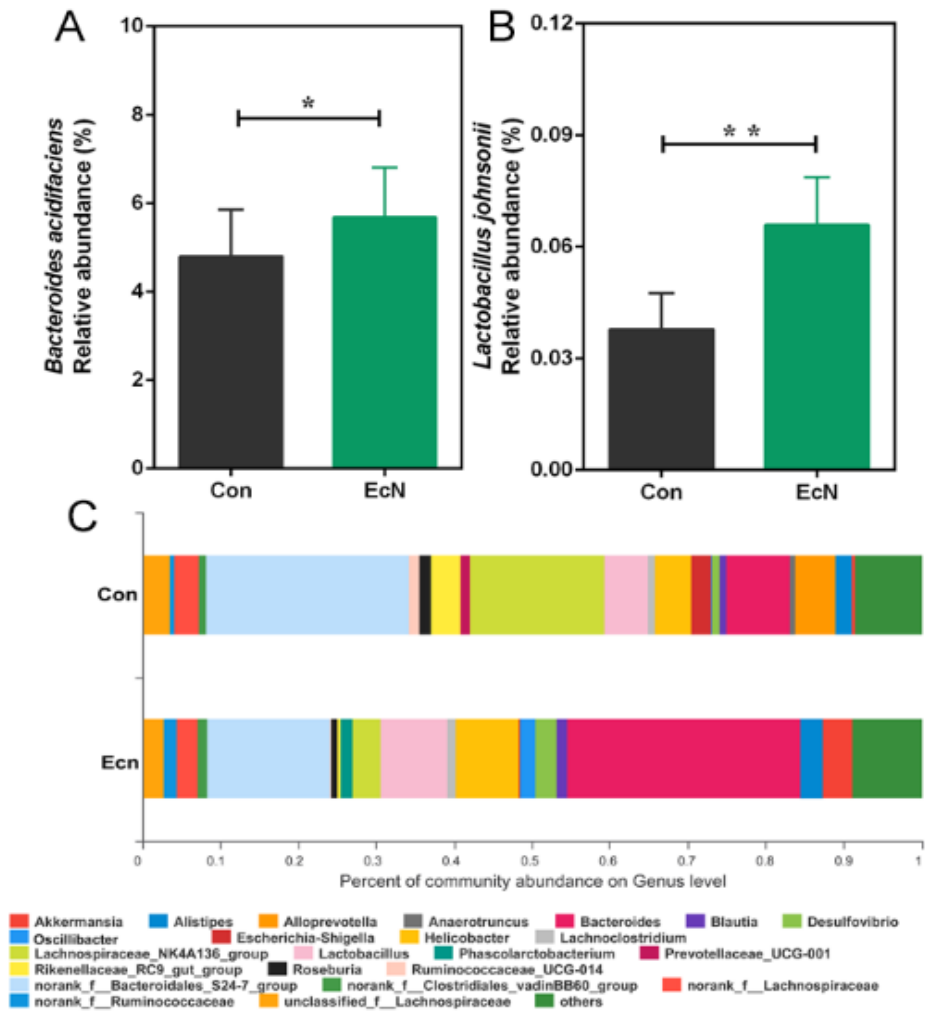
**Figure S2.** Confocal laser scanning microscopy images of the larval zebrafish. Tumor cells were stained with Dir dye (red signal). Green signal represented for engineered EcN (pTM151) with a fluorescent reporter gene GFP.



**Figure S3.** Electropherogram of EcN-*focA*<sup>-</sup> gene by agarose gel electrophoresis. *focA* (~850 bp) was knockout by  $\lambda$ -Red recombination method which was performed with modification. 1: EcN; 2: blank; 3: marker; 4-7: parallel samples of EcN-*focA*<sup>-</sup> ( $n = 4$ ).



**Figure S4.** Tumor inhibition in H22 and 4T1 tumor-bearing mice which were orally treated with culture supernatants of EcN. Data are representative for two independent experiments. All data are shown as mean  $\pm$ SD. ( $n = 6$ , \*  $P < 0.05$ , \*\*  $P < 0.01$ )



**Figure S5.** (A) Relative abundance of *Bacteroides acidifaciens* between EcN-respond mice and tumor bearing controls. (B) Relative abundance of *Lactobacillus johnsonii* between EcN-respond mice and tumor bearing controls. (C) The community taxonomic composition and abundance distribution bar chart at genus level. All data are shown as mean  $\pm$  SD. (\*  $P < 0.05$ , \*\*  $P < 0.01$ )