

## Supplementary information, Fig. S5. The LSECtin-BTN3A3 axis promotes breast cancer tumor growth *in vivo*

(a) Gating strategy for the identification of tumor populations of BTN3A3<sup>high</sup> and BTN3A3<sup>low</sup> tumor cells in human xenograft tumors formed by 231-NC cells. The GFP-positive cells were tumor cells.

(b,d) Real-time PCR analysis showing the expression of *Btn3a1*, *Btn3a2*, *Btn3a3* relative to that of the housekeeping gene  $\beta$ -actin in BTN3A3<sup>high</sup> cells and BTN3A3<sup>low</sup> cells from human xenograft tumors (b) or clinical specimens (d). One of two experiments is shown.

(c,e)  $1 \times 10^3$  BTN3A3 <sup>high</sup> cells or BTN3A3<sup>low</sup> cells from human xenograft tumors (c) or clinical specimens (e) were injected into WT-Nude mice (n=10 each). Tumor volumes were monitored weekly (c) or monthly (e). One of two experiments is shown.

(f)  $1 \times 10^3$  231-NC or 231-sh4 cells were injected into KO-nude mice or littermate controls (n=15 each). Tumor volumes were monitored weekly. One of two experiments is shown.

(g) Immunofluorescent staining of tumor tissues for human CD90 in the human xenograft tumors formed by 231-NC and 231-sh4 cells. The anti-human CD90 antibody without reactivity with mouse CD90 were used in the immunofluorescence analysis. The arithmetic mean of CD90 immunofluorescent staining intensity are shown.

(h)  $1 \times 10^3$  BTN3A3<sup>high</sup> cells or BTN3A3<sup>low</sup> cells from human xenograft tumors were injected into KO-LyZ2-Rag1<sup>-/-</sup> mice or littermate controls (n=10 each). Tumor volume was monitored weekly. One of two experiments is shown.

(i) An admixture of  $1 \times 10^3$  231-NC or 231-sh4 cells and  $1 \times 10^4$  WT-TAMs or KO-TAMs were injected into KO-Nude mice (n=20 each). Tumor volume was monitored weekly. One of two experiments is shown.

\*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001 (two-way ANOVA test for c, f, h, i; unpaired Student's t test for g).