**Supplementary information**

**In vivo experiments**

Combined effect of anti- BAG3 and anti-PD-1 antibodies in inhibiting PDAC growth and increasing the number of CD8+ cells in tumours. Murine pancreatic cancer mt4-2D cells (0.25 × 106) were injected into the right flank of female C57BL6 mice (6-week-old; Harlan Laboratories). After 10 days, mice were randomized into 4 arms consisting of 10 mice each in which tumour volume average was ∼100 mm3. One group received i.p. injection of anti-BAG3 (AC-2, 20 mg Kg-1 ) 3 times a week; another group received i.p. injection of anti- PD-1 (clone J43–bioxcell, 10 mg Kg-1  ) twice a week; a third group received treatment with both anti-BAG3 and anti-PD-1 antibodies; the control group received i.p. injection of an unrelated IgG (Bioxcell Clone: MOPC-21 Catalog#: BE0083, 20 mg Kg-1 ) 3 times a week. Animals were weighted and tumour volume was measured by caliper once weekly. Tumours were excised and analysed by confocal microscopy at the end of the experiment. Data are expressed as mean and standard error (SE) for a sample size of ten in each group. p-value in figure are relative to Dunnett’s post-hoc test *vs* control group.

**Analysis of macrophage infiltrate in tumours.**

Macrophages were identified in excised tumours by immunofluorescence with an anti- F4/80 antibody (CI:A3-1, Abcam) in confocal microscopy. Nuclei were counterstained with 1µg ml-1 Hoechst 33342 (Molecular Probes, Oregon, USA). Three tumours per group and 9 fields per tumour were analysed.

**Count of CD8+ lymphocytes in tumours.**

CD8+ lymphocytes were identified in excised tumours by immunofluorescence with an anti- CD8 monoclonal antibody (C8/144B, Thermo Fisher) in confocal microscopy. Nuclei were counterstained with 1µg ml-1 Hoechst 33342 (Molecular Probes, Oregon, USA). Six tumours per group and 10 fields per tumour were analysed. Representative images of CD8 positivity were acquired in sequential scan mode by using the same acquisitions parameters (laser intensities, gain photomultipliers, pinhole aperture, objective × 40, zoom 1) when comparing experimental and control material.