## **Legends to Supplementary Figures**

#### **Supplementary Figure 1**

**CD11b**<sup>+</sup>**Gr-1**<sup>+</sup> **cells from 4T1 tumor-bearing mice produced similar amounts of ROS and NO than CD11b**<sup>+</sup>**Gr-1**<sup>+</sup> **cells from 4T1 tumor-bearing mice exposed to MPA. A)** Production of ROS by CD11b<sup>+</sup>**Gr-1**<sup>+</sup> cells from tumor-bearing mice (4T1) and from tumor-bearing mice treated with MPA (4T1+MPA) in basal conditions (-) or upon *ex vivo* stimulation with PMA. **B**) Production of NO by CD11b<sup>+</sup>**Gr**-1<sup>+</sup> cells from tumor-bearing mice (4T1) and from tumor-bearing mice treated with MPA (4T1+MPA). MFI for ROS and NO were depicted in A and B. C) Representative histograms. Results from one representative experiment are shown.

### **Supplementary Figure 2**

Longer exposure to MPA does not further increase the expansion of CD11b<sup>+</sup>Gr-1<sup>+</sup> cells in mammary tumor-bearing mice. Mice were injected with MPA, and 26 days later they were injected with 4T1 cells. When tumors reached a volume of 1000 mm<sup>3</sup>, mice were euthanized, and spleens were used to assess the accumulation of CD11b<sup>+</sup>Gr-1<sup>+</sup> cells. A) Percentage of CD11b<sup>+</sup>Gr-1<sup>high</sup> and CD11b<sup>+</sup>Gr-1<sup>low</sup> cells in spleens of control mice (injected with PBS or MPA alone) and in tumor-bearing mice (in the absence or in the presence of MPA). B) Effect of chronic exposure to MPA on total leukocytes, T cells (CD3<sup>+</sup> cells), NK cells (CD3<sup>-</sup>DX5<sup>+</sup> cells), MDSCs (CD11b<sup>+</sup>Gr-1<sup>+</sup> cells), G-MDSCs (CD11b<sup>+</sup>Gr-1<sup>high</sup> cells), M-MDSCs (CD11b<sup>+</sup>Gr-1<sup>low</sup> cells). Data of cells/ml and percentages in blood of mice treated with PBS or with MPA were depicted. *In vivo* experiments were performed twice with > 5 animals per group.

#### **Supplementary Figure 3**

**CD11b**<sup>+</sup>**Gr-1**<sup>+</sup> **cells do not regulate the expression of NKG2D and NKp46.** Expression of NKG2D (**A**, **B**) and NKp46 (**C**, **D**) on NK cells (gated as CD3<sup>-</sup>CD49b<sup>+</sup> cells) from spleens of normal BALB/c mice upon culture overnight in the absence (-) or in the presence of sorted CD11b<sup>+</sup>Gr-1<sup>+</sup> cells isolated from spleens of 4T1 tumor-bearing mice [+CD11b<sup>+</sup>Gr-1<sup>+</sup> (4T1)] or from 4T1 tumor-bearing mice exposed to MPA [+CD11b<sup>+</sup>Gr-1<sup>+</sup> (4T1+MPA)]. Data from different combinations of NK cells and CD11b<sup>+</sup>Gr-1<sup>+</sup> cells together with the mean and SEM are shown (**A**, **C**). Representative dot plots (**B**, **D**). Gray histograms: IC control mAb. Results from one representative experiment are shown and *in vivo* experiments were performed twice with  $\geq$  3 animals per group.

# **Supplementary Figures**



**Supplementary Figure 1** 











