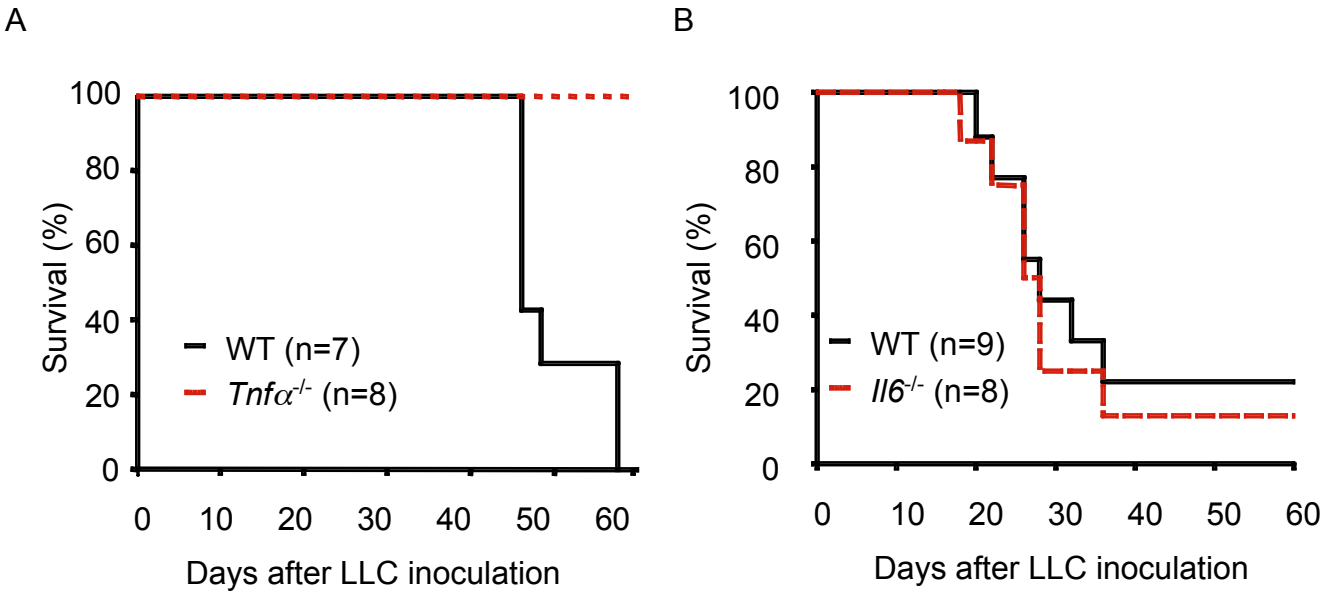
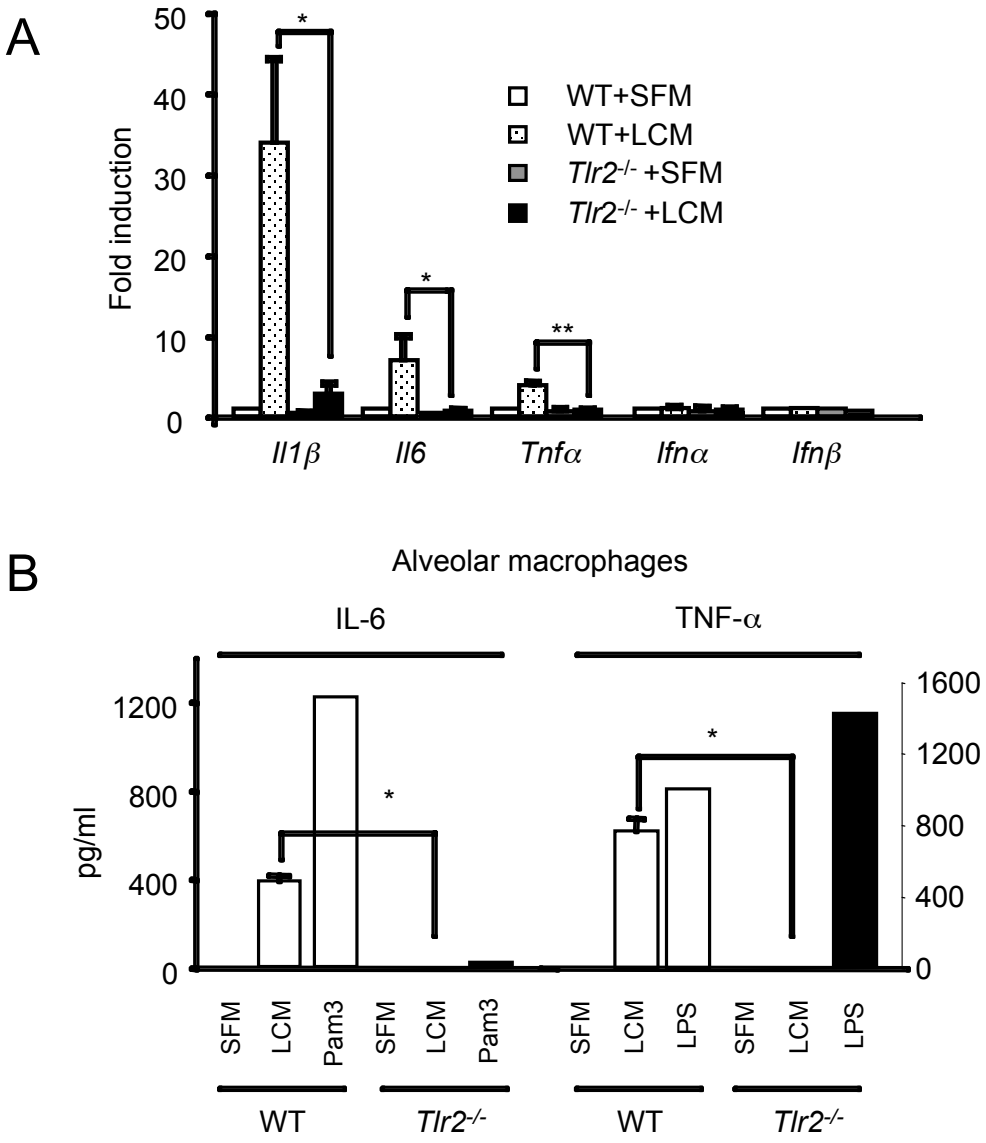
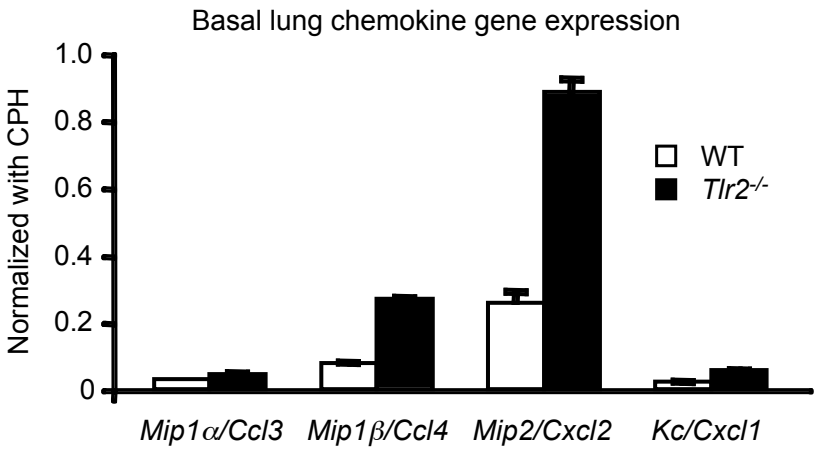


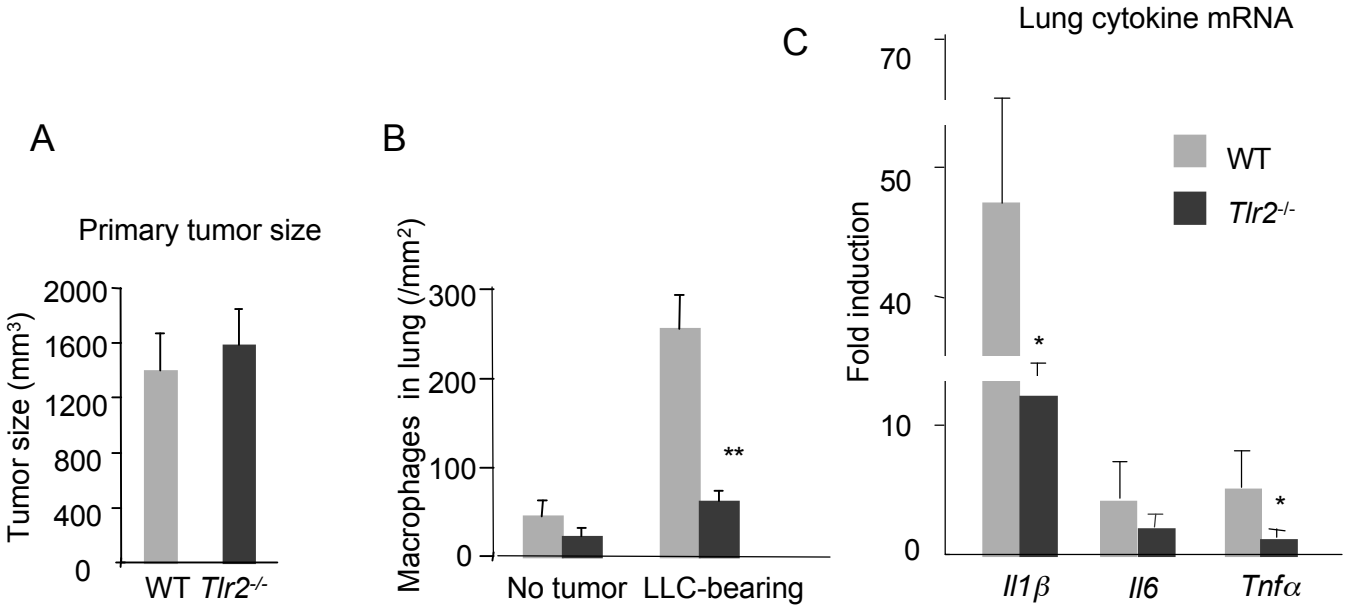
Supplementary figure 1. Role of TNF-α and IL-6 in lung metastasis. **A.** Survival curves of WT (n=7) and *Tnfα*$^{-/-}$ (n=8) mice inoculated with LLC (2x10^5 cells/mouse) via the tail vein ($p<0.001$; Log-rank test for significance). **B.** Survival curves of WT (n=9) and *Il6*$^{-/-}$ (n=8) mice inoculated with LLC (1x10^6 cells/mouse) as above.



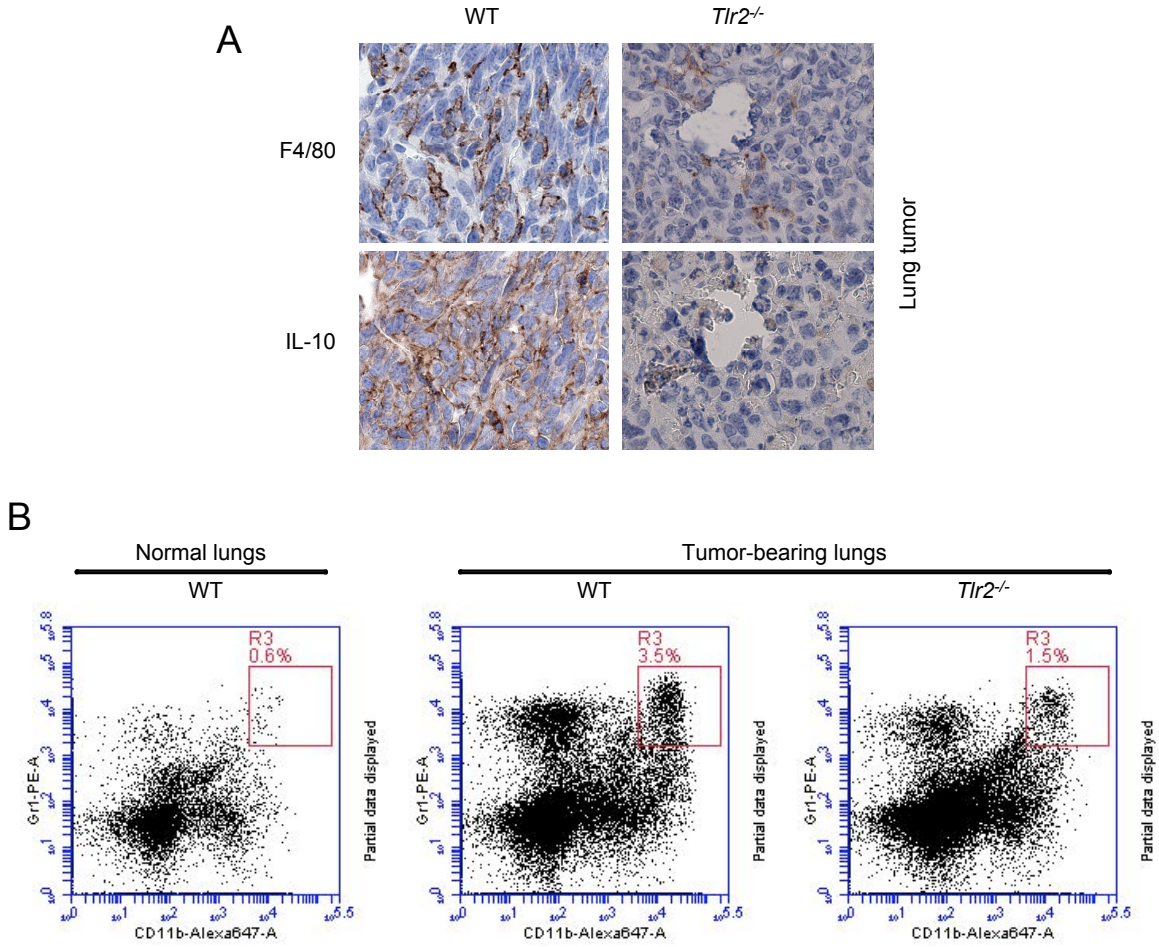
Supplementary figure 2. Role of TLR2 in LCM-mediated inflammatory cytokine expression. **A.** Expression of cytokine mRNAs in WT or *Tlr2*$^{-/-}$ BMDM incubated with SFM or LCM. Relative amounts of the indicated mRNAs were determined as in Fig. 1B (results are averages ± s.d., n=3, *; $p<0.03$, **; $p=0.003$ (compared to WT) by Student's *t* test). **B.** IL-6 and TNF-α production by WT or *Tlr2*$^{-/-}$ alveolar macrophages incubated with SFM, LCM, Pam3CSK4 (1 ng ml^{-1}) or LPS (100 pg ml^{-1}) (results are averages ± s.d., n=3, *; $p<0.01$ (compared to WT) by Student's *t* test).



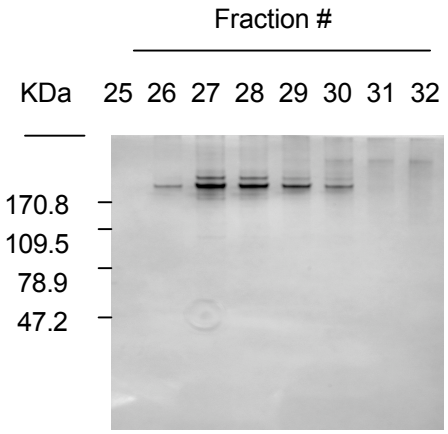
Supplementary figure 3. Basal expression of chemokine mRNAs in WT or *Tlr2*$^{-/-}$ lungs. Results are averages ± s.e.m. and n=3 for each group.



Supplementary figure 4. TLR2 is required for LLC-induced inflammation but not for primary tumor growth. WT and *Tlr2*$^{-/-}$ mice were subcutaneously (SC) injected with LLC ($1x10^7$ cells/mouse). After 15 days, mice were sacrificed and SC tumor volume (A) and macrophage numbers in whole lungs (B) were measured. (C) Expression of cytokine mRNAs in lungs of tumor-bearing mice was measured by Q-PCR and is expressed as relative fold-induction above the mRNA amounts in lungs of non-inoculated mice (results are averages ± s.d. and n=3 for each group, **; $p<0.01$, *; $p<0.05$ by Student's *t* test).

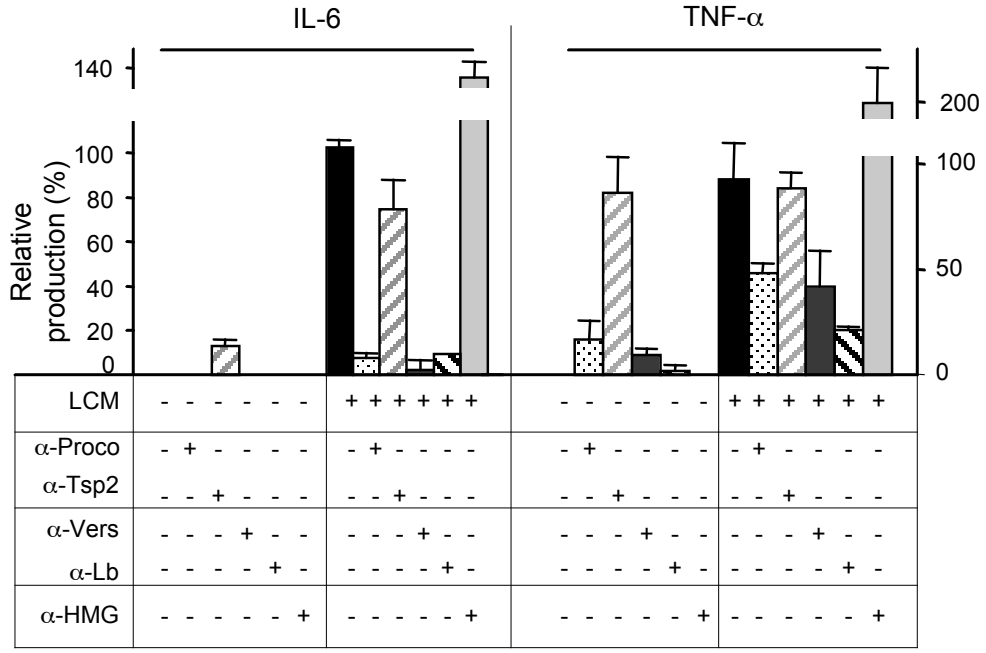


Supplementary figure 5. A. M2 macrophages (IL-10^{high}/$F4/80^{+}$) in WT and *Tlr2*$^{-/-}$ lung tumors formed by tail vein inoculation of LLC (magnification: 1000x). **B.** $CD11b^{+}$/$Gr1^{+}$ inflammatory monocytes/myeloid suppressors in tumor bearing lungs of WT and *Tlr2*$^{-/-}$ mice and normal WT lungs.

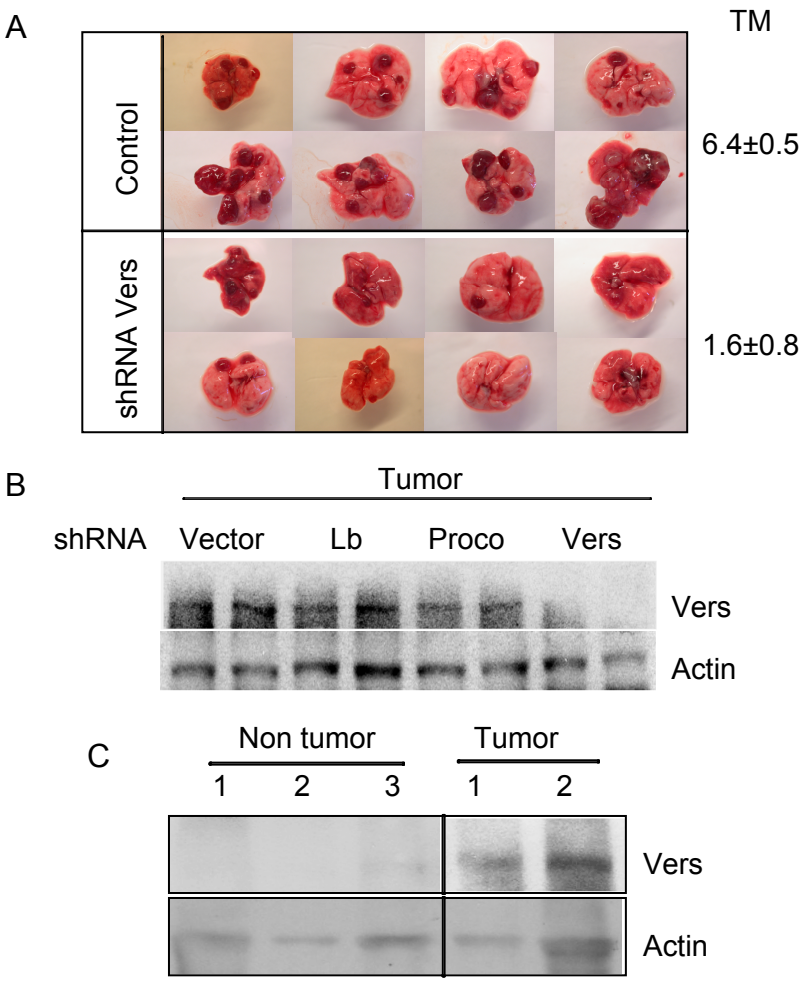


Fraction number	Original	25	26	27	28	29	30	31	32
Conc. (μg/μl)	0.0246	N/D	N/D	0.0012	0.0013	0.0036	0.0036	0.005	0.0076
Elisa (IL-6, ng/ml)	0.092	0.497	1.284	2.128	2.899	2.118	1.350	1.341	0.783
Specific activity (SA)	0.04	N/A	N/A	17.2	22.5	6	4.1	2.5	1
SA/Original	1	N/A	N/A	459	601	159	109	67	28

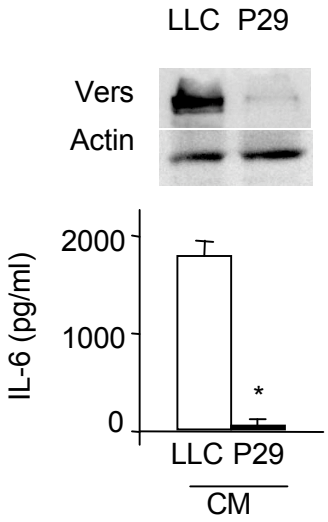
Supplementary figure 6. After separation on an anion exchange column, the pooled IL-6 inducing LCM fractions were size fractionated on a Superdex 200 column. (upper) Silver stained column fractions separated on a 4-12% Bis-Tris gel. (lower) BMDM were cultured with column fractions for 20-24 hrs a nd IL-6 production was measured to determine specific activity and fold-purification (SA/original). Fractions 27 and 28 were pooled for mass spectrometric analysis.



Supplementary figure 7. BMDM were cultured with or without LCM and/or polyclonal antibodies against the indicated proteins (Proco: procollagen III α1, Tsp2: thrombospondin 2, Vers: versican v1, Lb: laminin β1, HMG: HMGB1), a nd cytokine secretion relative to BMDM incubated with LCM alone was measured.



Supplementary figure 8. Versican knockdown reduces lung metastasis by LLC. **A.** Lungs of mice analyzed 20 days after tail vein inoculation of LLC transduced with either control or a versican shRNA lentiviruses. TM is indicated on the left (results are averages ± s.e.m., n=8 for each group, $p<0.001$ by student's *t* test). **B.** Versican expression in lung tumors. Lung tumors from the mice described in Fig. 5C (left) were microdissected and tumor lysates were analyzed by immunoblotting to confirm that tumors formed by LLC cells transduced with the versican shRNA lentivirus retained their versican-deficient state. **C.** Versican expression was examined in non-tumor lung tissue and microdissected lung tumor nodules formed by LLC cells. Tissue lysates were analyzed by immunoblotting. Actin was used as a loading control.



Supplementary figure 9. CM from LLC and LLC-P29 (P29) cells were added to BMDM cultures and IL-6 production was measured (results are averages ± s.d., n=4, *; $p<0.01$ by Student's *t* test).