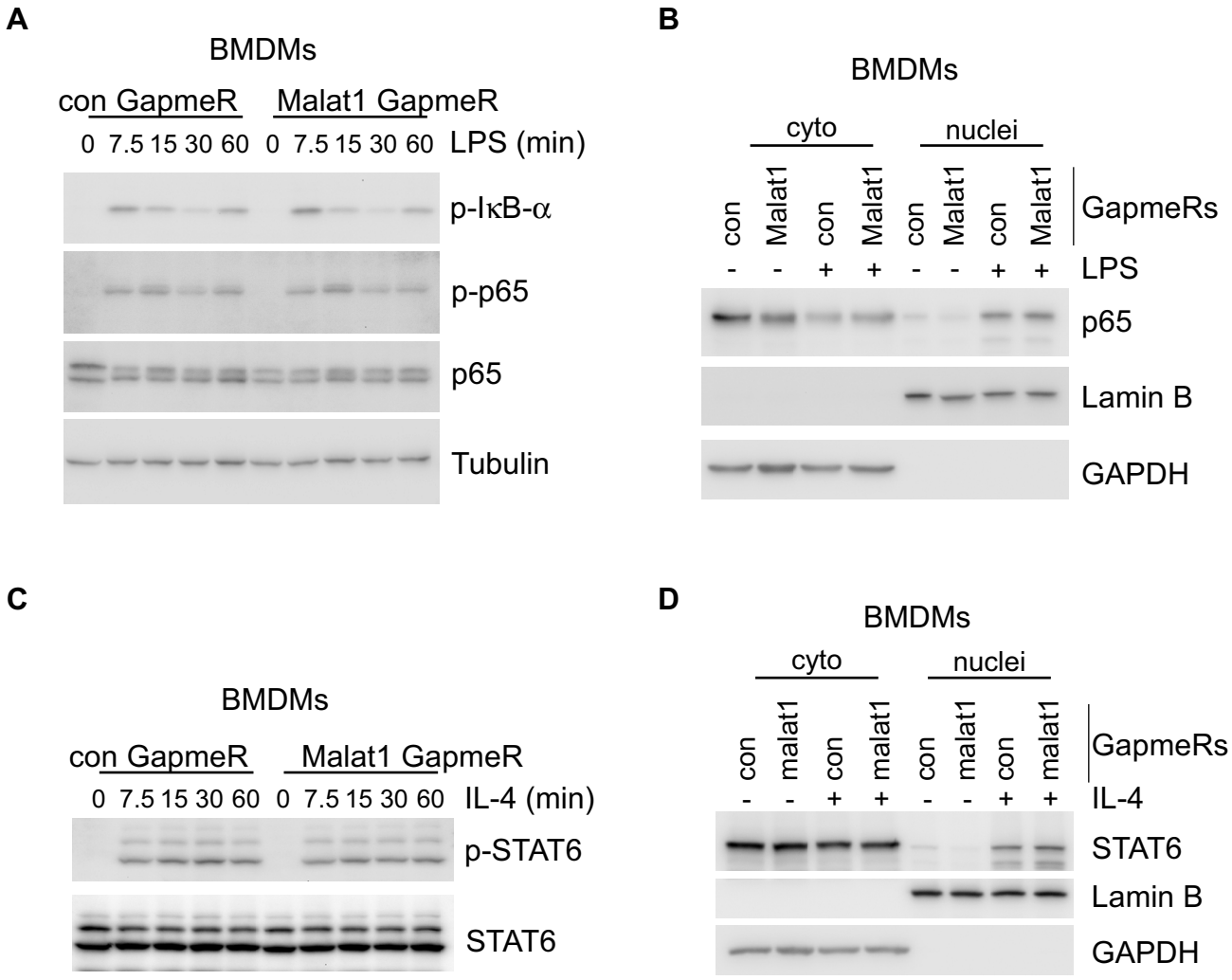
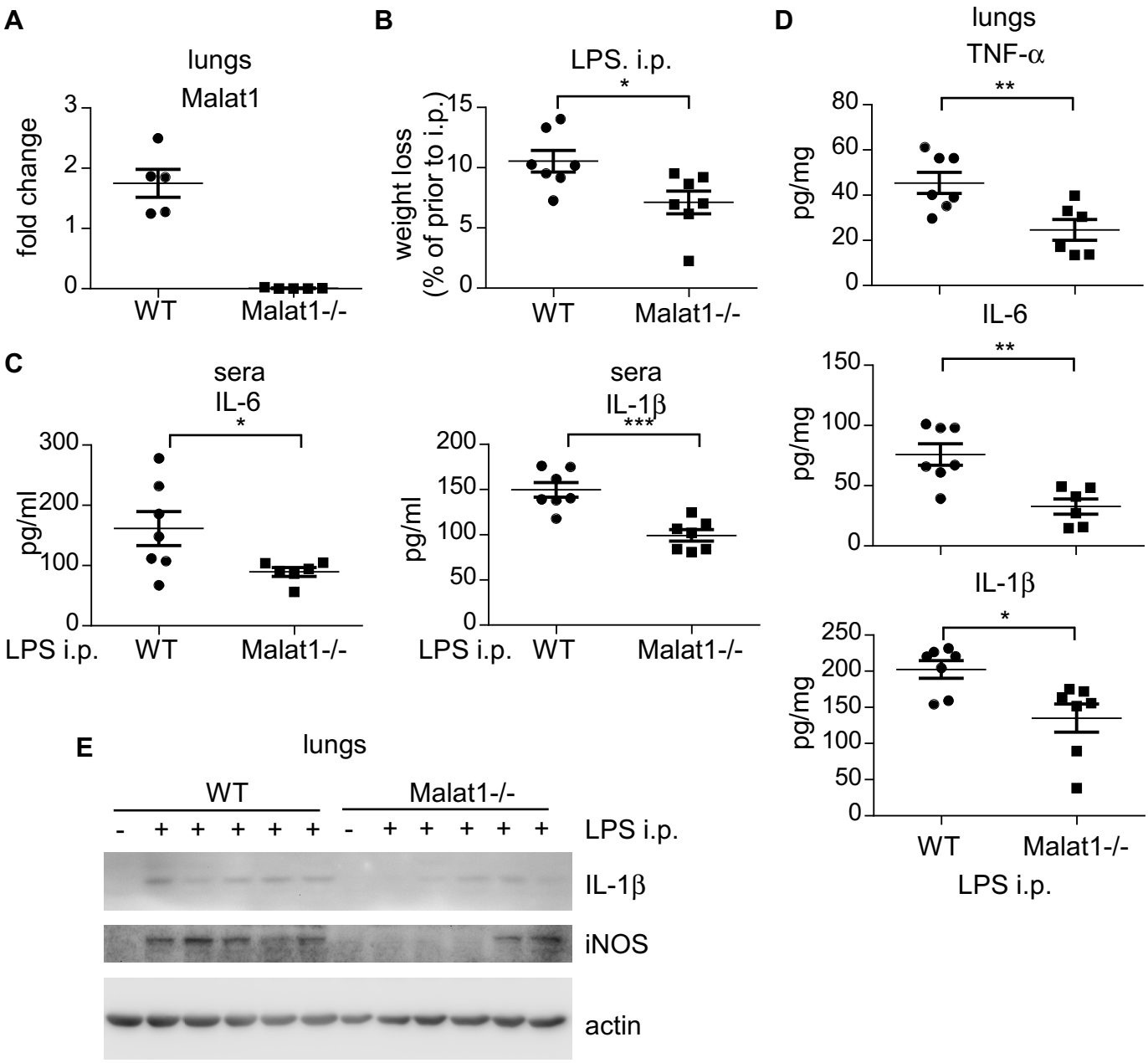
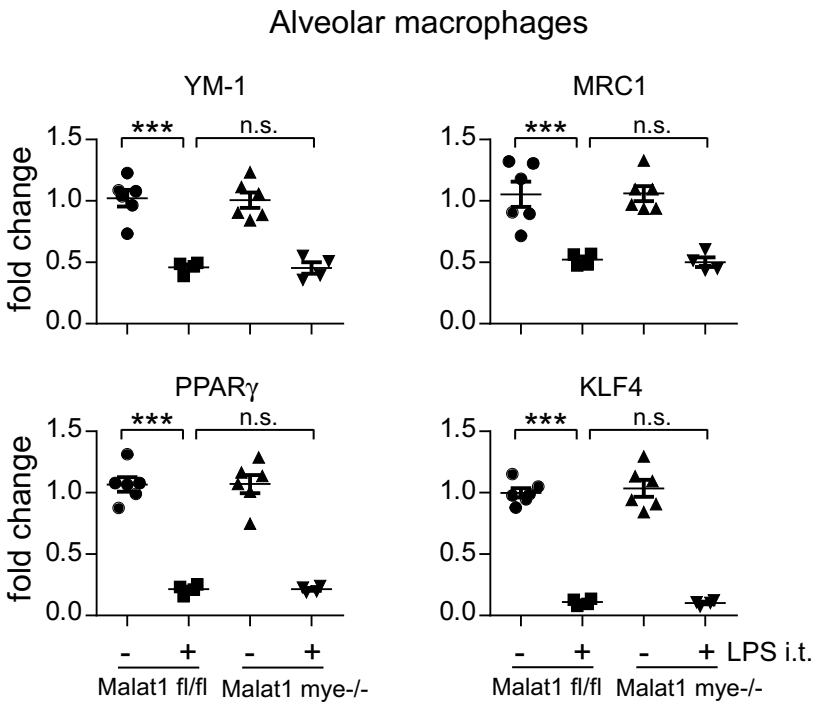


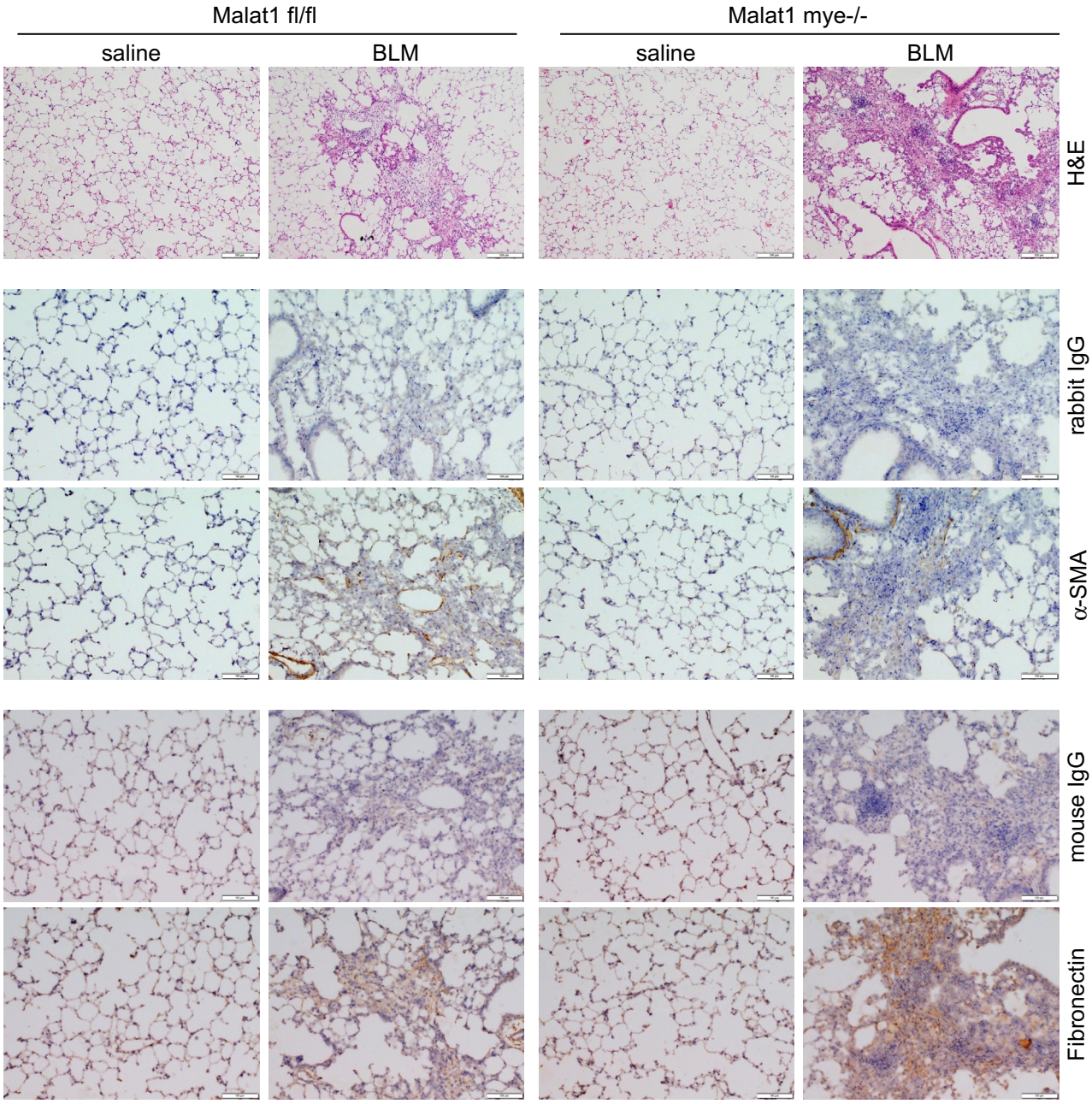
Supplementary Figure 1. Malat1 knockdown has no effects on proximal signaling events upon LPS or IL-4 stimulation in macrophages. (A) BMDMs were transfected with 20 nM con GapmeR or Malat1 GapmeR. 48h after transfection, the cells were treated with 100 ng/ml LPS for the indicated time. Levels of the indicated proteins were determined by Western blotting. (B) BMDMs were transfected with 20 nM con GapmeR or Malat1 GapmeR. 48h after transfection, the cells were treated with or without 100 ng/ml LPS for 1h. Cytoplasmic and nuclear fractions were prepared and levels of the indicated proteins were determined by Western blotting. (C) BMDMs were transfected with 20 nM con GapmeR or Malat1 GapmeR. 48h after transfection, the cells were treated with 5 ng/ml IL-4 for the indicated time. Levels of the indicated proteins were determined by Western blotting. (B) BMDMs were transfected with 20 nM con GapmeR or Malat1 GapmeR. 48h after transfection, the cells were treated with or without 5 ng/ml IL-4 for 1h. Cytoplasmic and nuclear fractions were prepared and levels of the indicated proteins were determined by Western blotting.



Supplementary Figure 2. Global knockout of Malat1 (Malat1-/-) attenuates endotoxemia induced systemic and pulmonary inflammation. (A) Levels of Malat1 in the lungs of wild-type (WT) and Malat1-/- mice were determined by real-time PCR. n=5 each for WT and Malat1-/- mice; mean±SE. (B) Wild-type and Malat1-/- mice were i.p. injected with 10 mg/kg LPS in 500 μl saline. 18h after LPS injection, percentage of mouse weight loss was calculated. * $p<0.05$. (C) Wild-type and Malat1-/- mice were i.p. injected with 10 mg/kg LPS in 500 μl saline. 18h after LPS injection, mice were sacrificed and sera prepared. Levels of the indicated pro-inflammatory cytokines were determined by ELISA. * $p<0.05$, *** $p<0.001$. (D) Wild-type and Malat1-/- mice were i.p. injected with 10 mg/kg LPS in 500 μl saline. 18h after LPS injection, mice were sacrificed. Lung homogenates were prepared. Levels of the indicated pro-inflammatory cytokines were determined by ELISA. * $p<0.05$, ** $p<0.01$. (E) Experiments were performed as in "D". Levels of IL-1ß and iNOS were determined by Western blotting. n=7 each for WT and Malat1-/- mice; mean±SE.



Supplementary Figure 3. Myeloid ablation of Malat1 had no effect on expression of markers and mediators of alternative activation in the alveolar macrophages of the LPS treated mice. Malat1 fl/fl and Malat1 mye-/- mice were i.t. instilled with 50 μl saline or 5 mg/kg LPS in 50 μl saline. 24h after administration, alveolar macrophages were harvested and mRNA levels of the indicated anti-inflammatory genes determined by real-time PCR. n=6, 4, 6, 4 mice for each group; mean±SE; *** $p<0.001$, one-way ANOVA with Bonferroni test.



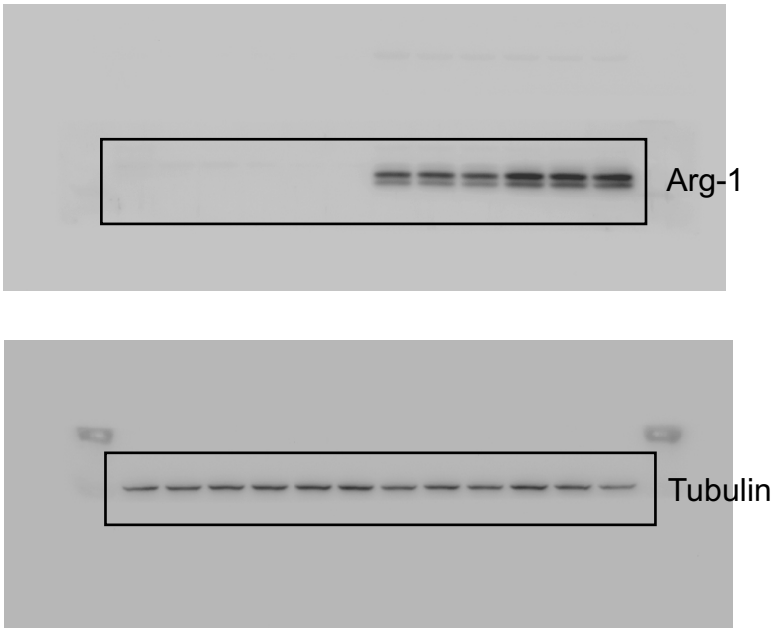
Supplementary Figure 4. Myeloid ablation of Malat1 aggravates bleomycin induced pulmonary fibrosis. Malat1 fl/fl and Malat1 mye-/- mice were i.t. instilled with 50 μl saline or 1.5 U/kg bleomycin (BLM) in 50 μl saline. 3 weeks after bleomycin administration, mice were sacrificed and lung histological sections prepared. Haemotoxylin and eosin (H&E) staining and IHC stainings of a-SMA and fibronectin were performed. H&E staining: original magnification, ×10; scale bar: 200 μm. IHC stainings: original magnification, ×20; scale bar: 100 μm.

Supplementary Table 1. Top 10 upregulated and downregulated genes in Malat1 knockdown (KD) BMDMs.

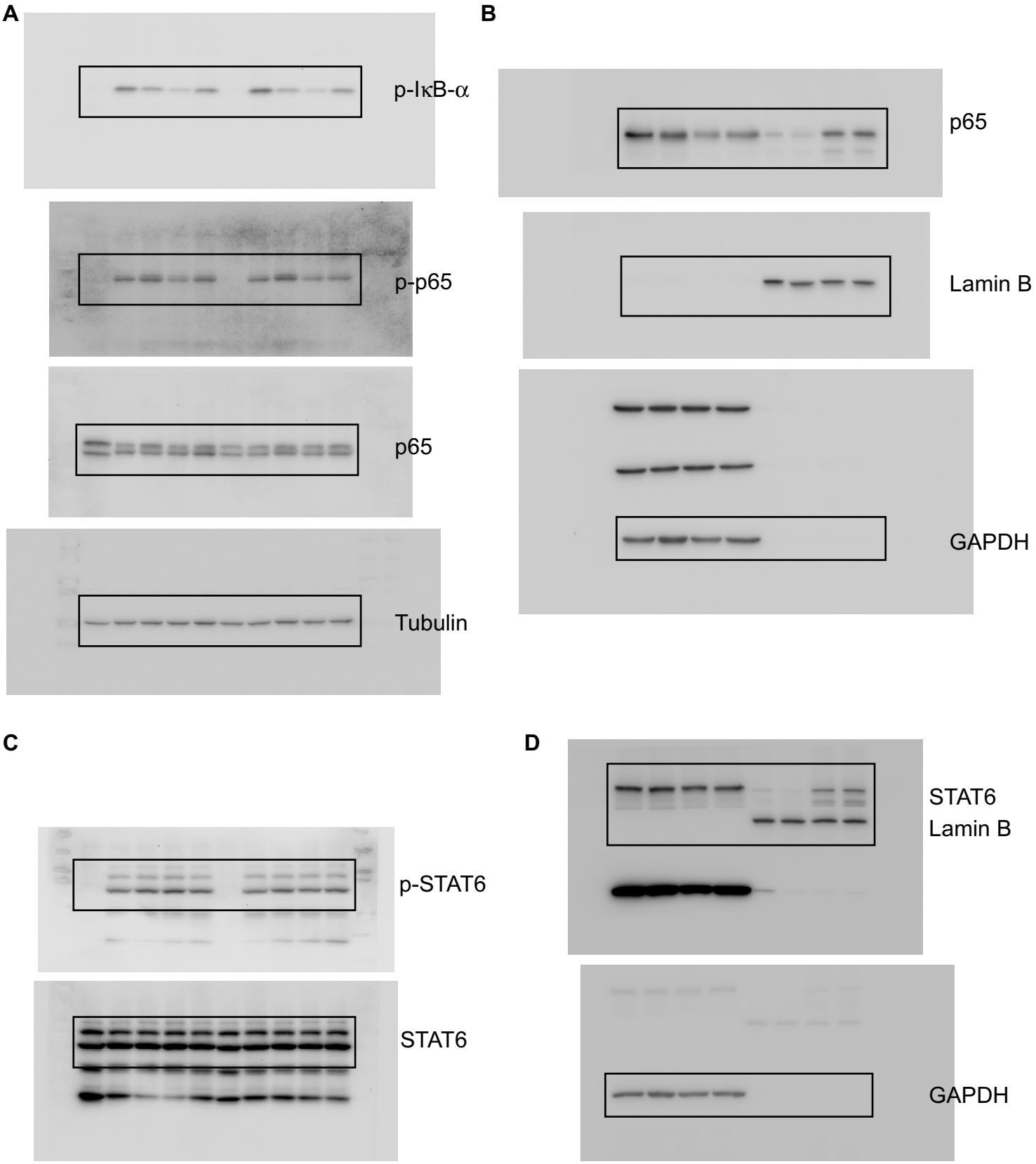
Gene symbol	Gene name	Fold change (Malat1 KD *vs* control)	*P* value (adjusted)
Malat1	metastasis associated lung adenocarcinoma transcript 1 (non-coding RNA)	-25.54	1.19E-232
Downregulated			
Clec16a	C-type lectin domain family 16, member A	-6.30	9.63E-45
Pi4ka	phosphatidylinositol 4-kinase, catalytic, alpha polypeptide	-3.33	6.96E-29
B230118H07Rik	RIKEN cDNA B230118H07 gene	-2.70	3.40E-11
Mgat5	mannoside acetylglucosaminyltransferase 5	-2.70	4.80E-15
Ksr1	kinase suppressor of ras 1	-2.56	7.61E-09
Fpr1	formyl peptide receptor 1	-2.53	1.18E-14
Aoah	acyloxyacyl hydrolase	-2.51	3.21E-18
Cd300e	CD300e antigen	-2.46	4.39E-18
Igsf9	immunoglobulin superfamily, member 9	-2.23	1.26E-09
Fcrl5	Fc receptor-like 5	-2.23	4.69E-06
Upregulated			
Mybpc3	myosin binding protein C, cardiac	18.82	1.04E-120
Avil	advillin	7.67	4.03E-45
Bzrap1	benzodiazepine receptor associated protein 1	7.08	4.91E-61
Gm42547	predicted gene, 42547	5.17	9.43E-36
Mdk	midkine	3.15	6.21E-13
Ero1lb	ERO1-like beta (S. cerevisiae)	3.03	3.95E-21
Gm35339	predicted gene, 35339	2.85	1.21E-13
0610037L13Rik	RIKEN cDNA 0610037L13 gene	2.68	6.14E-14
Rltpr	RGD motif, leucine rich repeats, tropomodulin domain and proline-rich containing	2.66	3.25E-09
Ankrd2	ankyrin repeat domain 2 (stretch responsive muscle)	2.45	4.31E-08

Figure 5

B



Supplementary Figure 1



Supplementary Figure 3

E