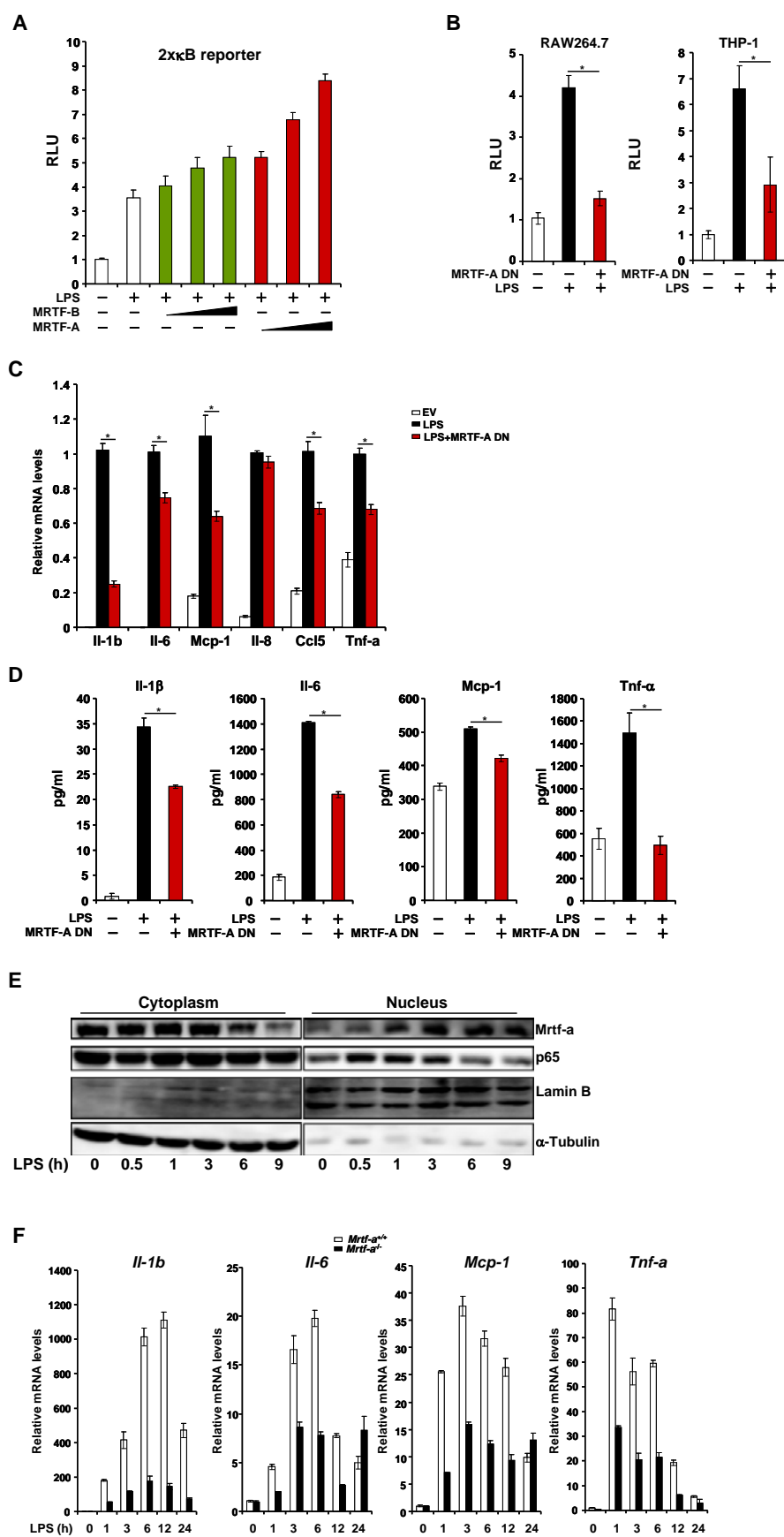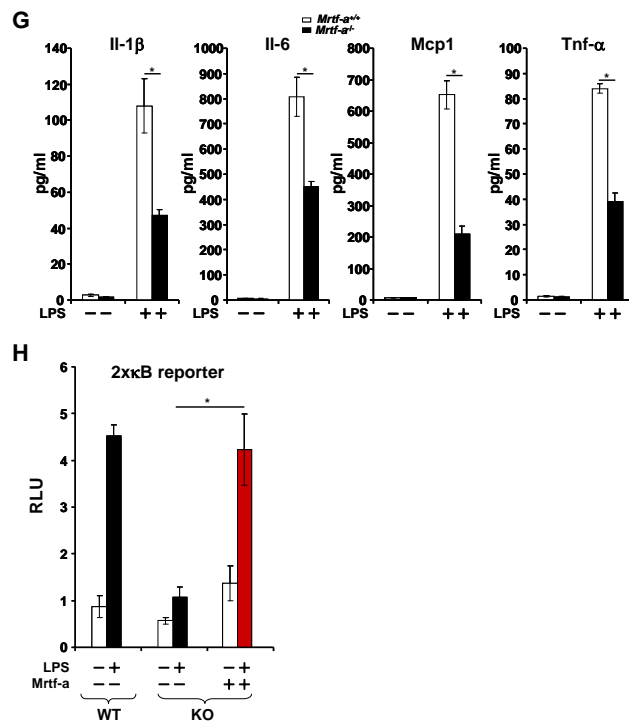**Yu LM et al: MRTF-A mediates LPS-induced pro-inflammatory transcription by interacting with the COMPASS complex**

Supplementary Figures: **3**

Supplementary Tables: **2**

Fig.S1: (**A**) A 2xκB reporter construct was transfected into RAW264.7 cells with or without MRTF-A/MRTF-B followed by treatment with LPS. Data are expressed RLU. (**B**) A 2xκB reporter construct was transfected into RAW264.7 cells with or without dominant negative (DN) MRTF-A followed by treatment with LPS. Luciferase activities are expressed as RLU. (**C, D**) MRTF-A DN construct was transfected into RAW264.7 cells followed by treatment with LPS. Message RNA (C) and protein (D) levels of pro-inflammatory mediators were examined by qPCR and ELISA. (**E**) RAW264.7 cells were treated with LPS and harvested at indicated time points for cytoplasmic/nuclear fractionation. Western blotting was performed with indicated antibodies. (**F, G**) MEFs from wild type or MRTF-A deficient mice were treated with or without LPS for 3 hours. Message RNA (F) and protein (G) levels of pro-inflammatory mediators were examined by qPCR and ELISA. (**H**) A 2xκB reporter construct was transfected into WT or MRTF-A KO MEF cells with or without MRTF-A followed by treatment with LPS. Data are expressed RLU. *, $p < .05$. All quantitative data show the mean±S.D.
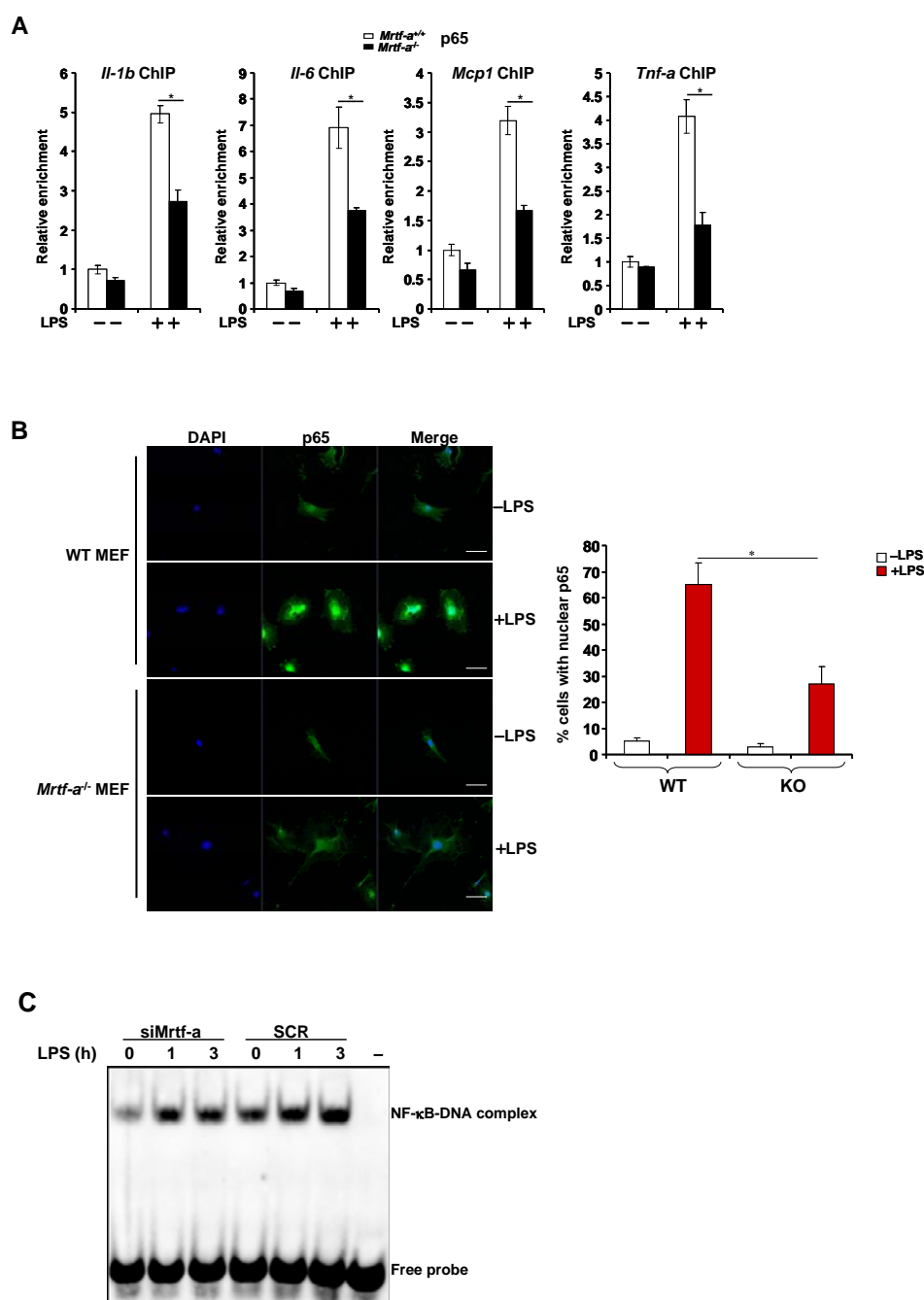
Fig.S2: (**A**) WT or MRTF-A KO MEF cells were treated with LPS for 3 hours and ChIP assay was performed with anti-p65. (**B**) WT or MRTF-A KO MEF cells were treated with LPS for 1 hour and immunofluorescence staining was performed with anti-p65. Scale bar, 20μm (**C**) RAW264.7 cells were transfected with indicated siRNAs followed by treatment with LPS. Gel shift assay was performed as described under *Methods*. *, $p < .05$. All quantitative data show the mean±S.D.
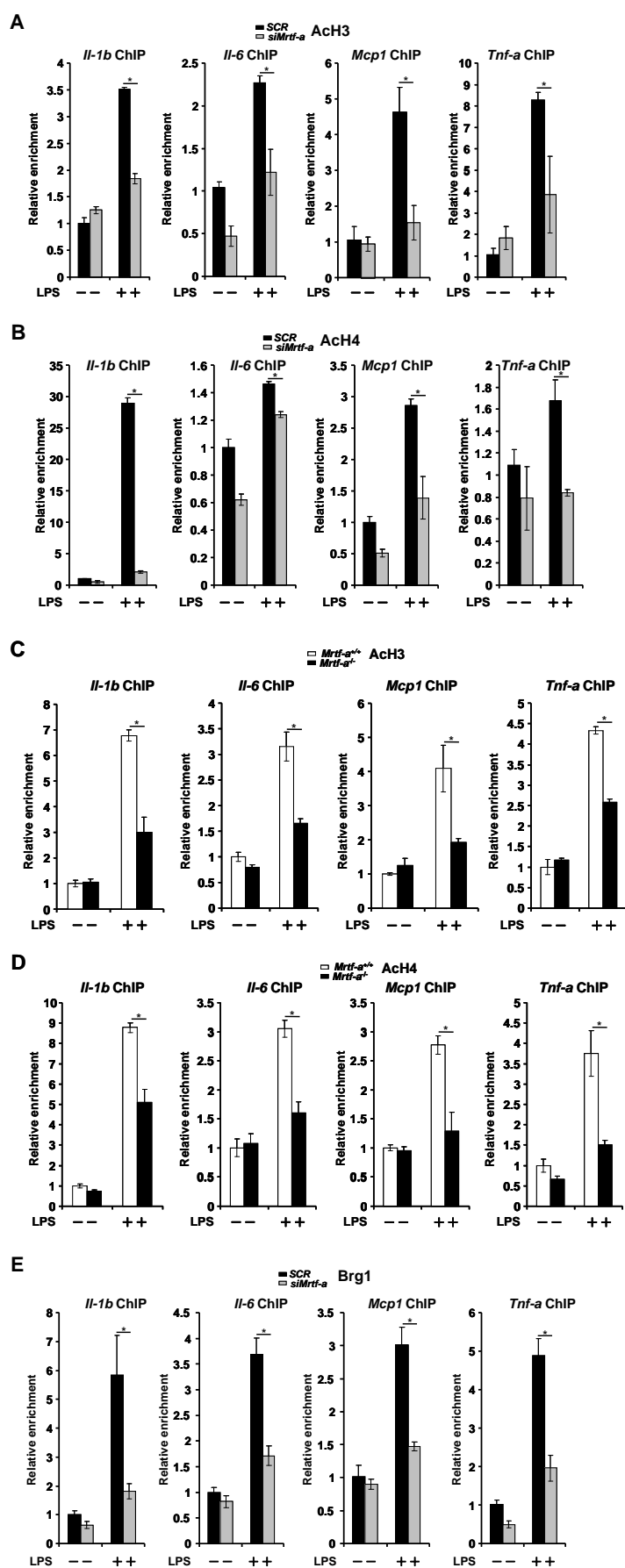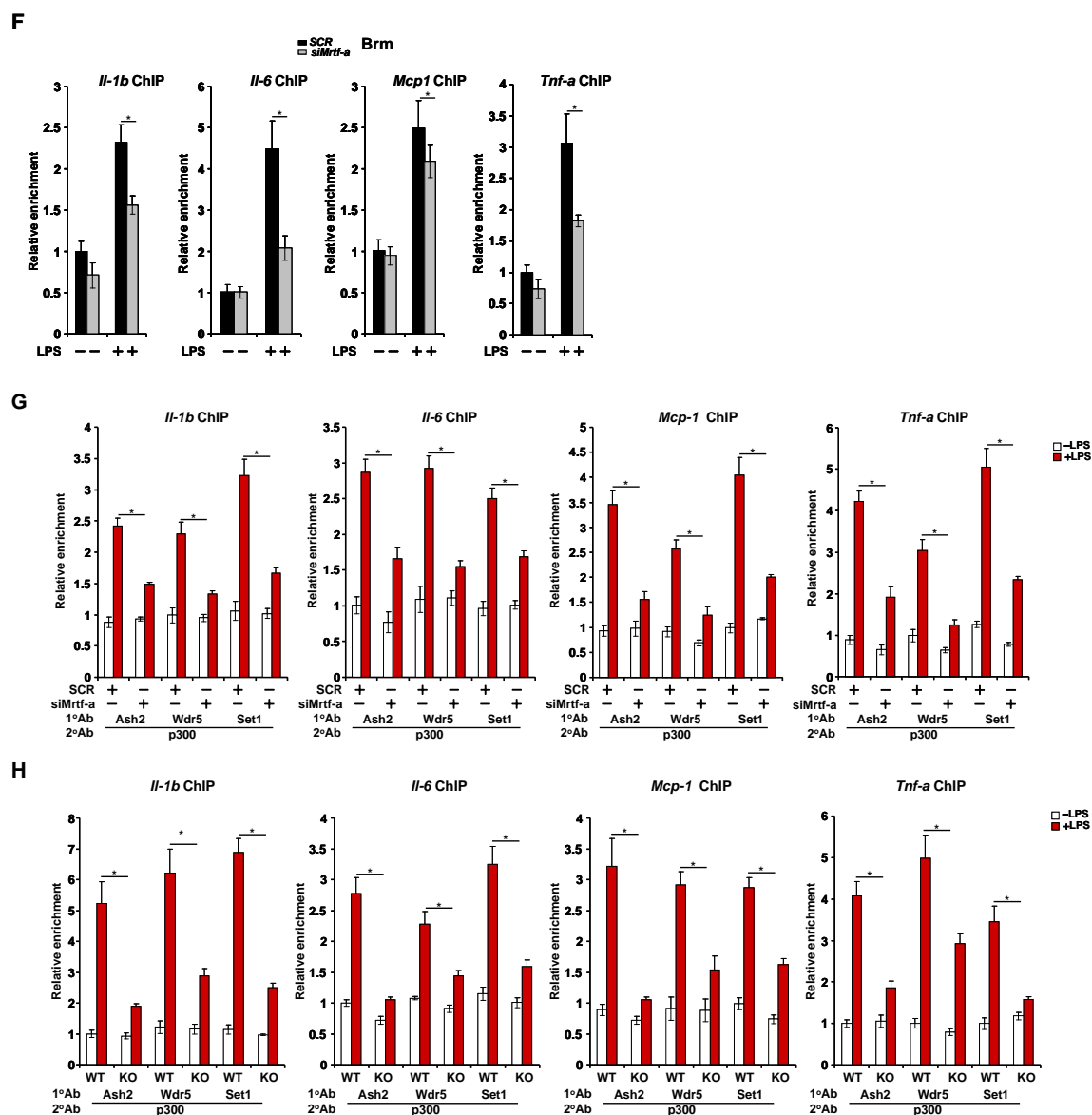
Fig.S3: (**A, B**) RAW264.7 cells were transfected with indicated siRNAs followed by treatment with LPS. ChIP assays were performed with anti-acetyl H3 (A) or anti-acetyl H4 (B). (**C, D**) WT or MRTF-A KO MEF cells were treated with LPS for 3 hours and ChIP assay was performed with anti-acetyl H3 (C) or anti-acetyl H4 (D). (**E, F**) RAW264.7 cells were transfected with indicated siRNAs followed by treatment with LPS. ChIP assays were performed with anti-Brg1 (E) or anti-Brm (F). (**G**) RAW264.7 cells were transfected with indicated siRNAs followed by treatment with LPS. Re-ChIP assays were performed with indicated antibodies. (**H**) WT or MRTF-A KO MEF cells were treated with LPS for 3 hours. Re-ChIP assays were performed with indicated antibodies. *, $p < .05$. All quantitative data show the mean ± S.D.

Table 1: **siRNA sequences**

Mouse Mrtf-a	CATGGAGCTGGTGGAGAAGAA
Mouse p65	UGUGUCCAUUGUCUCACUC
Mouse Ash2	CGAGTCTTGTTAGCCCTACAT
Mouse Wdr5	GCCGTTCATTTCAACCGTGAT
Mouse Set1	CAGCATATTATGAAAGCTGGA

Table 2: ChIP Real-time qPCR primers

Mouse Il-1	Forward: 5'-AACGGAGGAGCCGTTGATATG -3'
	Reverse: 5'-AGAGCATCTTCCTAATGC-3'
Mouse Il-1 intron	Forward: 5'-AACGTCTGTGTCCGTGTG-3'
	Reverse: 5'-ACTCTATCCAGGGATTTAG-3'
Mouse Il-6	Forward: 5'- AGCTCATTCTGCTCTG-3'
	Reverse: 5'-AGATTGCACAATGTGACGTCG-3'
Mouse Il-6 intron	Forward: 5'-AAGGTCAGACTAGACTGTG-3'
	Reverse: 5'-ATCCCCACCTAAGAACGAATAG-3'
Mouse Mcp-1	Forward: 5'-CGTGGGAAAATCCAGTATTTTAATG-3'
	Reverse: 5'-CAAATGTATCACCATGCAAATATGC-3'
Mouse Tnf	Forward: 5'-TGAGTTGATGTACCGCAGTCAAGA-3'
	Reverse: 5'-AGAGCAGCTTGAGAGTTGGGAAGT-3'
Mouse Cxcl2	Forward: 5'-CAACAGTGTACTTACGCAGACG-3'
	Reverse: 5'-CTAGCTGCCTGCCTCATTCTAC-3'