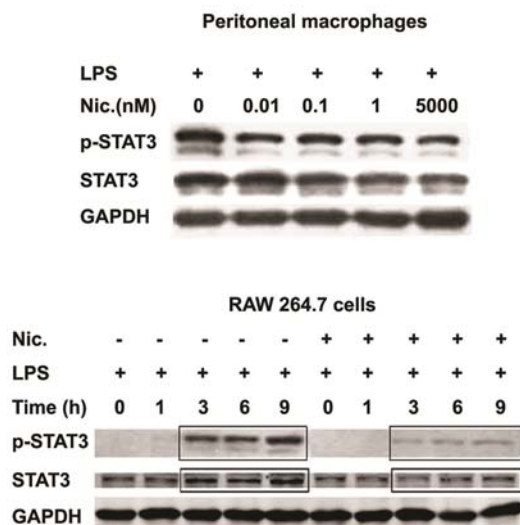


Supplementary information, Figure S4

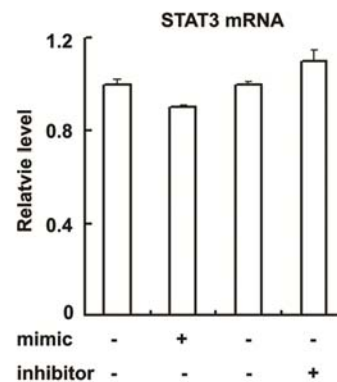
A

		predicted consequential pairing of target region (top) and miRNA (bottom)	seed match
Target site 1	Position 823-830 of STAT3 3' UTR	5' . . . CAGCCUGCCUGUGGGUGCCUUA . . . 	8mer
	mmu-miR-124a	3' . . . CCGUAAGUGGCG--CACGGAAU	
Target site 2	Position 823-830 of STAT3 3' UTR	5' . . . CAGCCUGCCUGUGGGUGCCUUA . . . 	8mer
	mmu-miR-124a.2	3' . . . ACCGUAAGUGGCG--CACGGAAU	

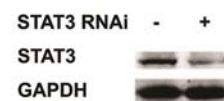
B



C



D



E

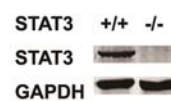


Figure S4 miR-124 is predicted to target STAT3, and nicotine treatment reduces STAT3 and LPS-induced STAT3 phosphorylation. **(A)** The alignment of miR-124 and its target sites in 3'-UTR of STAT3 was from TargetScan (<http://www.targetscan.org>). **(B)** Upper panel: Western blotting of STAT3 and phosphorylated STAT3 at Y705 in peritoneal macrophages treated with 100 ng/ml LPS together with the indicated doses of nicotine for 9 h. Lower panel: Western blotting of STAT3 protein and phosphorylated STAT3 at Y705 in RAW264.7 cells stimulated with 100 ng/ml LPS in the presence or absence of nicotine (5 mM) for the indicated times. Results are representative of three independent experiments. **(C)** q-PCR detection of STAT3 mRNA in RAW264.7 cells transfected with miR-124 mimic or miR-124 inhibitor and

their corresponding controls for 36 h. Data represent mean \pm S.D. ($n = 3$). **(D)** Representative western blotting of STAT3 protein in RAW264.7 macrophages transfected with control siRNA or STAT3 siRNA for 48 h ($n = 3$). **(E)** Representative western blotting of STAT3 protein in STAT3^{+/+} MEF from E13.5 mouse embryos or STAT3^{-/-} MEF cell line ($n = 3$).