Supplement Material

PCR protocol and sequence information of PCR primers

The PCR cycling conditions were: 1 cycle pre-denaturation at 95 °C for 10min, followed by 40 cycles of denaturation at 95 °C for 10 s, annealing at 60 °C for 30s, and extension at 72 °C for 30s. The PCR products were dissociated after amplification: 95°C degeneration for 15s, 60°C annealing for 1min, then slow heating to 95°C for 30s, and finally 15s at 60°C.

Three duplicate wells were set in each group and experiments were repeated 6 times to take the average value. The results were processed by 7500 System Software V2.3 (Applied Biosystems, CA, USA) and beta-actin served as the internal reference. Relative mRNA expression was calculated using the $2^{-\triangle\triangle Ct}$ method with the formula, $\triangle\triangle Ct = (Ct_{\text{target gene}} - Ct_{\text{reference gene}})$ experiment group $- (Ct_{\text{target gene}} - Ct_{\text{reference gene}})$ control group.

The primers were designed using NCBI Primer-BLAST and verified by Blast, which were then synthesized by Shanghai Shenggong Bioengineering Co., Ltd. The primer sequences are available below.

Primer Name	Primer Sequence	Number of Bases
KLF4	F：5’-TTCCAACTCGCTAACCCACC-3’	20
	R：5’-TTGATGTCCGCCAGGTTGAA-3’	20
β-actin	F：5’-TAGGCGGACTGTTACTGAGC-3’	20
	R：5’-TGCTCCAACCAACTGCTGTC-3’	20
iNOS	F：5’-GTTCTCAGCCCAACAATACAAGA-3’	23

	R：5’-GTGGACGGGTCGATGTCAC-3’	19
Arg-1	F：5’-CAAGACAGGGCTCCTTTCAG-3’	20
	R：5’-CTTGGGAGGAGAAGGCGTTT-3’	20
TNF-α	F：5’-ATAGCTCCCAGAAAAGCAAGC-3’	21
	R：5’-CACCCCGAAGTTCAGTAGACA-3’	21
TGF-β	F：5’-CTTCAATACGTCAGACATTCGGG-3’	23
	R：5’-GTAACGCCAGGAATTGTTGCTA-3’	22
IL-1β	F：5’-GCCTCGTGCTGTCGGACCCATAT-3’	23
	R：5’-TCCTTTGAGGCCCAAGGCCACA-3’	22
IL-10	F：5’-CTTACTGACTGGCATGAGGATCA-3’	23
	R：5’-GCAGCTCTAGGAGCATGTGG-3’	20

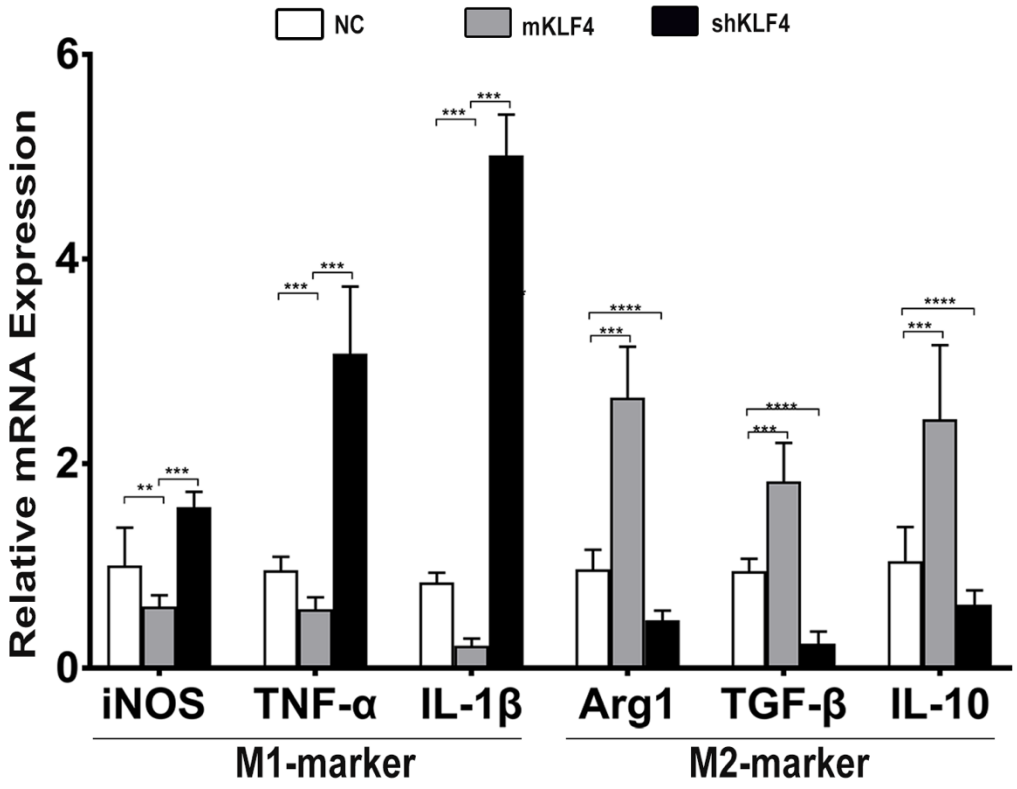

Figure S1: Relative marker mRNA expression of M1 and M2 subsets in different cell lines after 12h under regular culture conditions measured by QT-PCR. **, $p<0.01$; ***, $p<0.001$.

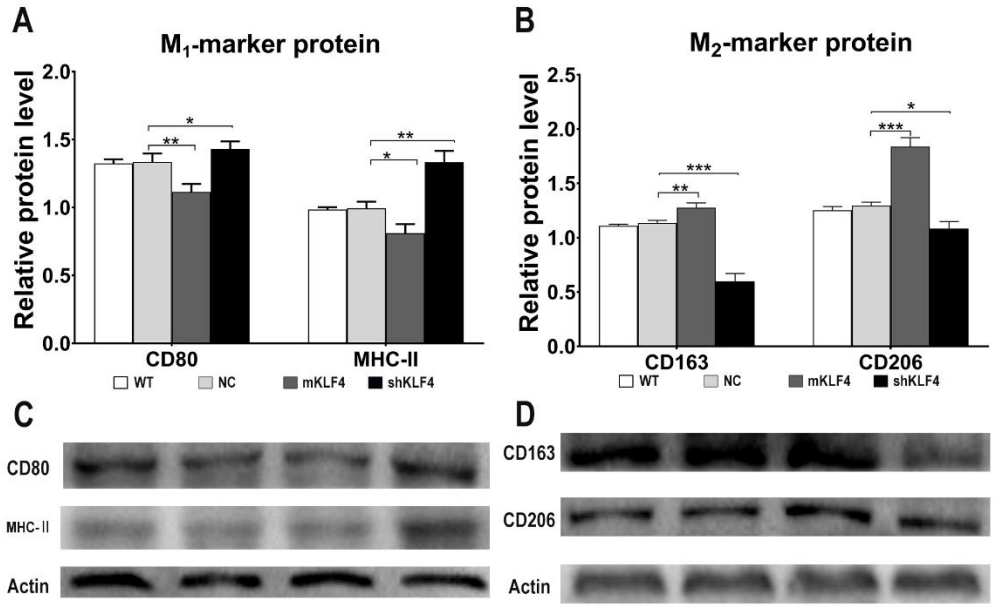

Figure S2: Marker protein expression of M1 and M2 subsets in different cell lines after 24h under regular culture conditions measured by western blot. *, p<0.05; **, p<0.01; ***, p<0.001.

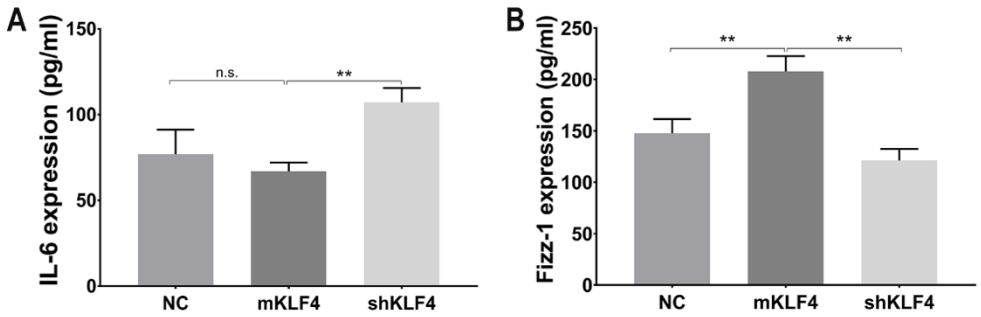

Figure S3: Marker factors expression of M1(IL-6) and M2(Fizz-1) subsets in different cell lines after 24h under regular culture conditions measured by ELISA. *, p<0.05; **, p<0.01; ***, p<0.001.

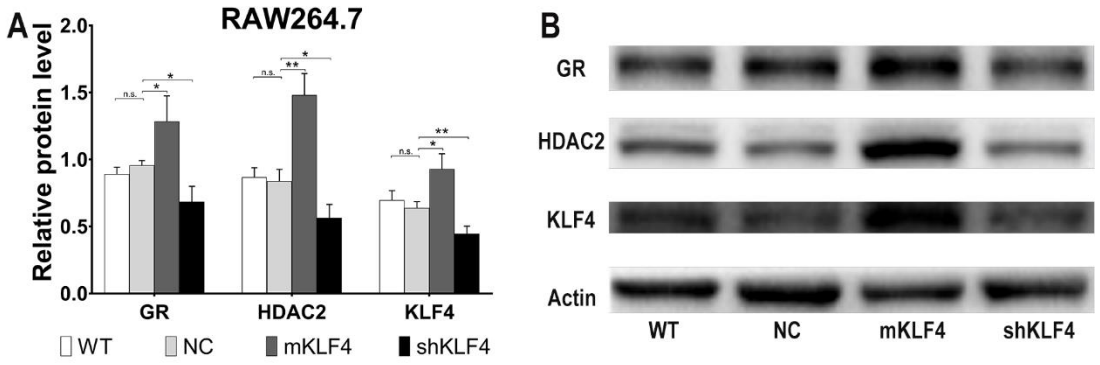

Figure S4: Western blot result of marker protein of GR pathway and KLF4 in four different groups after 24h under regular culture conditions. *, p<0.05; **, p<0.01; ***, p<0.001.

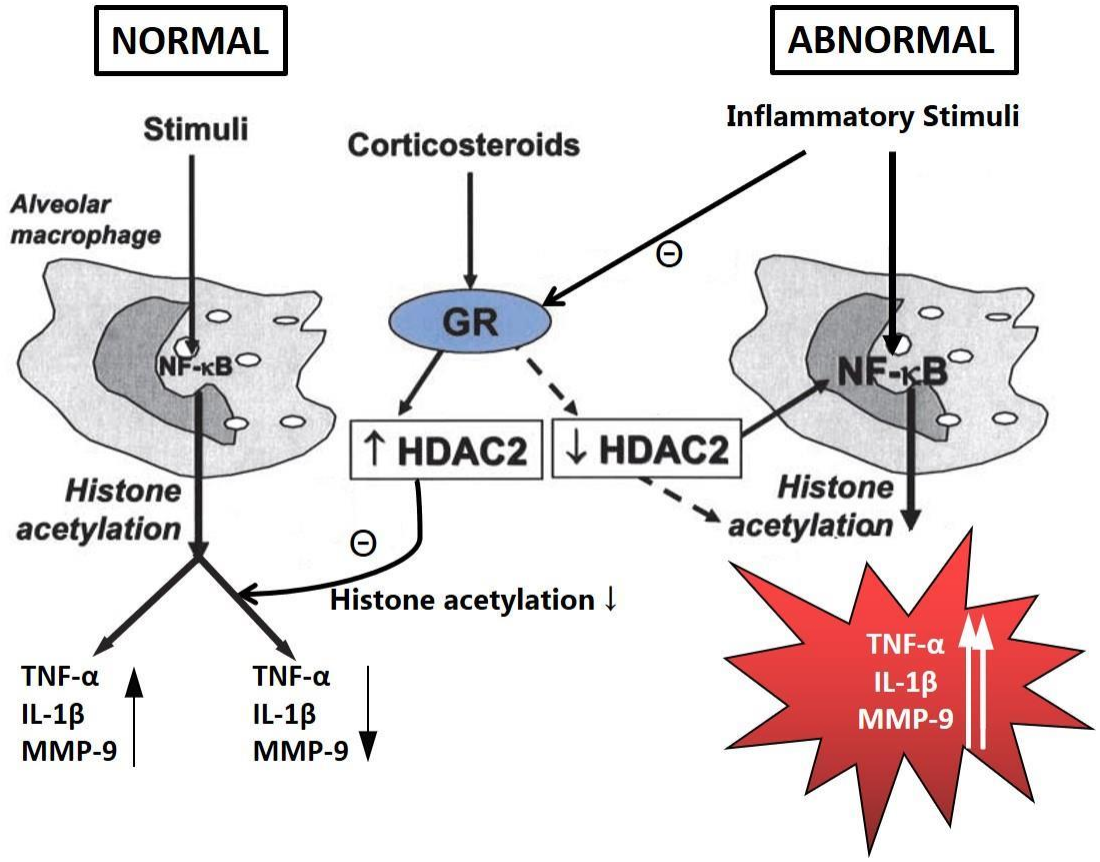

Figure S5: The effect of corticosteroids on NF-κB pathways under different conditions. GR: glucocorticoid receptor, HDAC2: histone acetylation 2.