Supplemental Table

Table S1. Reagents and Antibodies.

Reagents or Antibodies	concentration	catalogue	Manufacturer	country
Glycyrrhizin		50531	Sigma	USA
Ficoll-Hypaque Solution		LTS1092PK	TBD Science	China
Intranuclear fixation and permeabilization		00-5523	eBioscience	USA
Cell stimulation cocktail		00-4975	eBioscience	USA
Fixation and permeabilization kit		88-8824-00	eBioscience	USA
Phosphatase inhibitor cocktail		S1873	Beyotime	China
Enhanced BCA Protein Assay Kit		P0010	Beyotime	China
RevertAid First Strand cDNA Synthesis Kit		K1622	Thermo Scientific	USA
SYBR® Premix Ex Taq™ II		RR82LR	Takara	Japan
Total RNA Kit		DP419	TIANGEN Biotech	China
CD4-PE-Cy7		25-0042-82	eBioscience	USA
CD25-FITC		553071	BD	USA
Foxp3-PE		12-4771	eBioscience	USA
IL-17A-PE		12-7177-81	eBioscience	USA
Rabbit anti-HMGB1	1:200	BA4277	Wuhan Boster Bio-engineering	China
Rabbit anti-Foxp3	1:500	22173-1-AP	Proteintech Group	China
Rabbit anti-TLR4	1:500	Ab13556	Abcam	UK
Rabbit anti-RORγt	1:1000	Ab78007	Abcam	UK

Rabbit anti-IL-2	1:800	BS60299	Bioworld	USA
Rabbit anti-IL-6	1:800	BS6419	Bioworld	USA
Rabbit anti-STAT3	1:1000	9139	Cell Signaling	USA
Rabbit anti-p-STAT3	1:2000	9145P	Cell Signaling	USA
Rabbit anti-STAT5	1:1000	Ab68465	Abcam	UK
Rabbit anti-p-STAT5	1:1000	Ab32364	Abcam	UK
anti-β-action	1:200	BM0624	Wuhan Boster Bio-engineering	China
HMGB1 ELISA kit		E-EL-M0676c	Elabscience Biotechnology	China
IL-17A ELISA kit		EMC008	NeoBioscience	China
IL-10 ELISA kit		EMC005	NeoBioscience	China
IL-2 ELISA kit		EMC002	NeoBioscience	China
IL-6 ELISA kit		EMC004	NeoBioscience	China

Table S2. Sequences of primers for qRT-PCR.

Molecular	sequence(5'-3')
HMGB1 forward	5' CCAAAGCGATAGGAAACTGC 3'
HMGB1 reverse	5' AACAATAAGTGCCCCTCGTG 3'
Foxp3 forward	5' TGGAACCACGGGCACTATCACA 3'
Foxp3 reverse	5' GAGGCTGCGTATGATCAGTTATGC 3'
RORγt forward	5' TGCAAGACTCATCGACAAGG 3'
RORγt reverse	5' AGGGGATTCAACATCAGTGC 3'
IL-2 forward	5' TCTGGTCTTTGATGGGTTCTG 3'
IL-2 reverse	5' GCAGGTGATGGTAGGTGGAA 3'
IL-2R forward	5`AAAGGCAGGGAAATGAGGAT 3'
IL-2R reverse	5' ATCTTGGTGATGGGCAGAAG 3'
IL-6 forward	5' GAGGATACCACTCCCAACAGACC 3'
IL-6 reverse	5' AAGTGCATCATCGTTGTTCATACA 3'
IL-6R forward	5' TAGTGGCAGGGAAAGTGGAA 3'
IL-6R reverse	5' GGAGGGATGGGGAAAATAGA 3'
STAT5 forward	5' GGAAGATGGGTTTTTGCTGA 3'
STAT5 reverse	5' GGTTCTGATGCTGGGAGAGA 3'
STAT3 forward	5' TCTCCTTCCTCCCTTCCTTC 3'
STAT3 reverse	5' CCAGTCACCTCTGTCCCCTA 3'
IL-10 forward	5' GACAACATACTGCTAACCGACTC 3'
IL-10 reverse	5' TCACTCTTCACCTGCTCCACTG 3'

IL-17A forward	5' TCTCTGATGCTGTTGCTGCT 3'
IL-17A reverse	5' CGTGGAACGGTTGAGGTAGT 3'
TGF-β1 forward	5' TGACGTCACTGGAGTTGTACGG 3'
TGF-β1 reverse	5' GGTTCATGTCATGGATGGTGC 3'
TLR4 forward	5'CTGGGAAGGGGGATAACATT 3'
TLR4 reverse	5' CAGATAGTCGGAGGCTGTCAA 3'
GADPH forward	5' AGCAATGCCTCCTGCACCACCAAC 3'
GADPH reverse	5' CCGGAGGGGCCATCCACAGTCT 3'

Table S3. Body weight and blood glucose levels in *Apoe*$^{-/-}$ mice.

Age (weeks)	physiological indicator	Control	HFD	GLY
8	Weight (g)	23.17±0.70	24.17±0.31	23.67±0.42
	Glucose (mmol/L)	4.42±0.14	4.58±0.19	4.28±0.14
	Food intake (g)	4.42±0.14	4.58±0.19	4.28±0.14
16	Weight (g)	27.13±0.41	32.47±0.76 [a]	31.62±0.62
	Glucose (mmol/L)	4.43±0.12	5.65±0.23 [a]	5.88±0.17
	Food intake (g)	3.65±0.15	3.25±0.22	3.33±0.14
24	Weight (g)	28.62±0.34	36.72±0.69 [a]	32.95±0.56 [b]
	Glucose (mmol/L)	4.47±0.15	6.60±0.30 [a]	6.38±0.27
	Food intake (g)	3.53±0.18	3.21±0.14	3.23±0.13

Values are expressed as means ± SD.

HFD, high-fat diet group; GLY, glycyrrhizin treated group.

[a] p <0.05, compared with Control group.

[b] p <0.05, compared with HFD group.