

## Supplemental files

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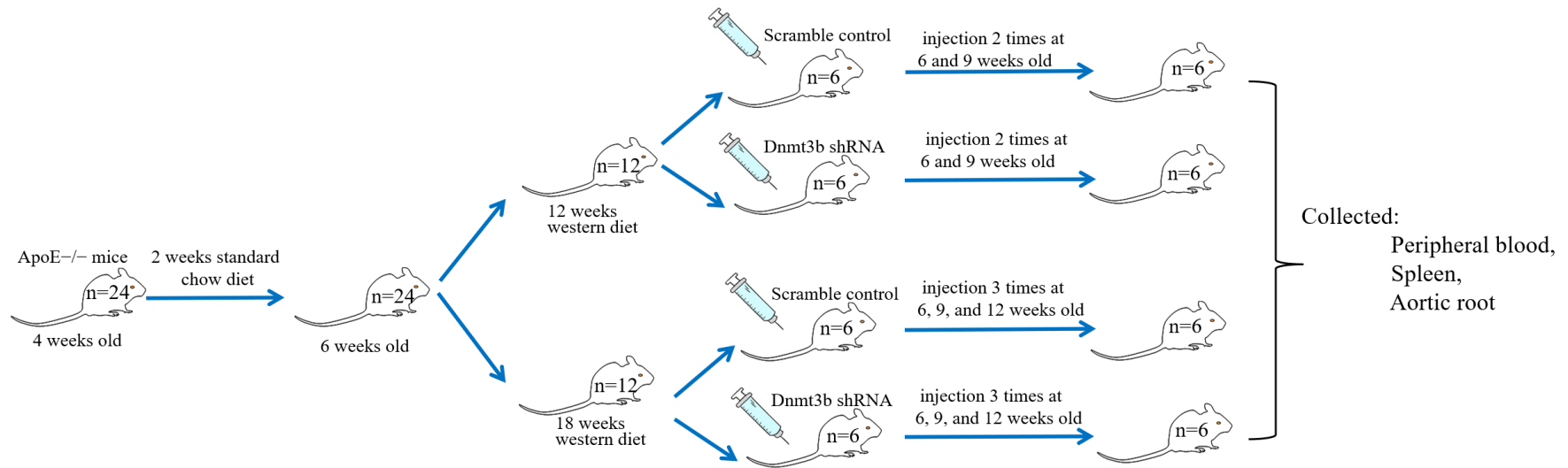
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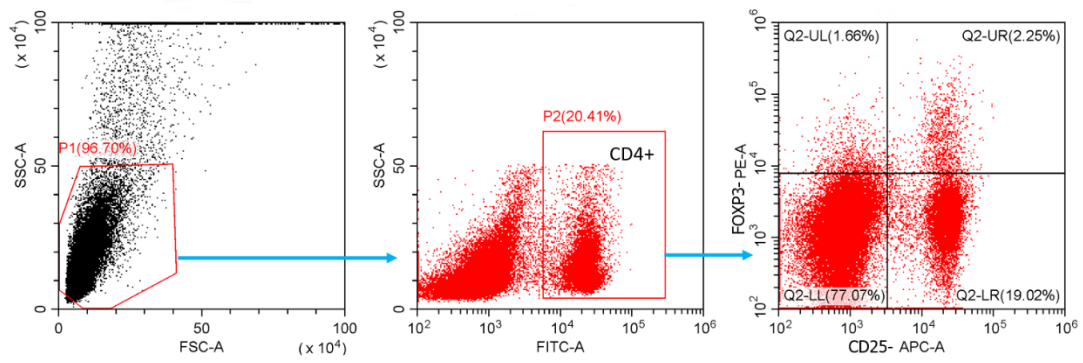
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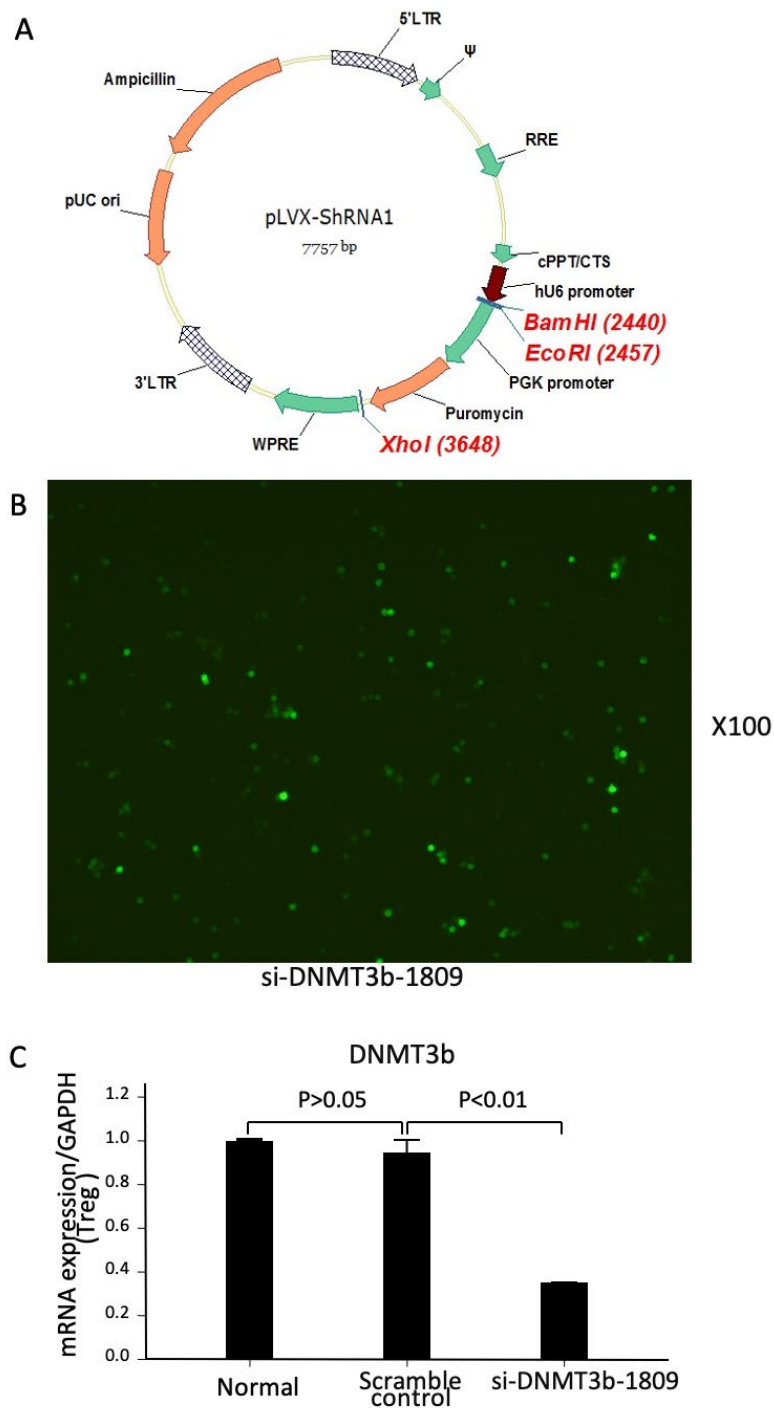
**Table 2.** Primers sequence of quantitative RT-PCR



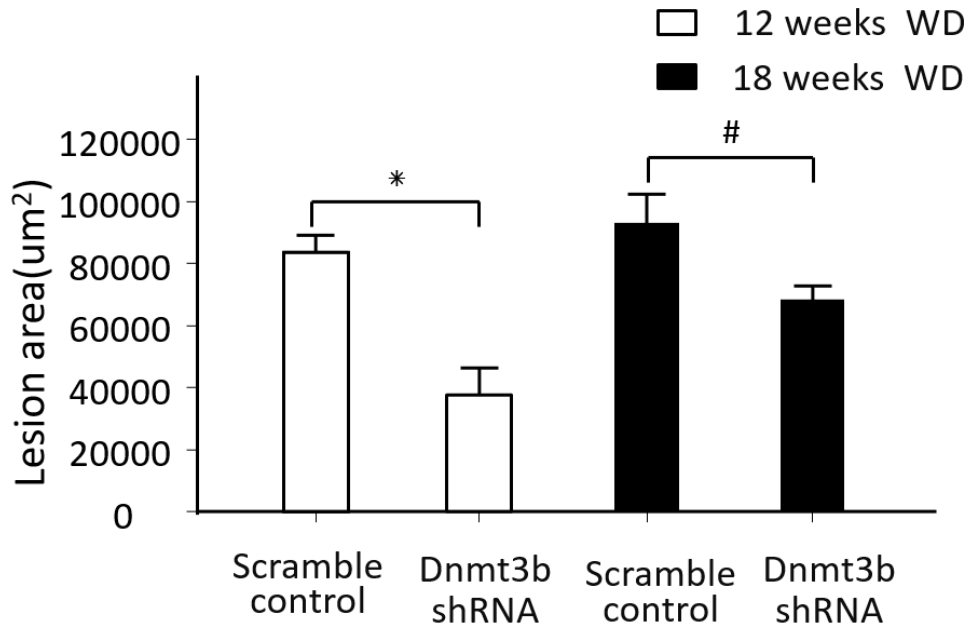
**Figure S1.** The diagram of animal experiments. Abbreviations: Dnmt3b, DNA methyltransferases 3b.



**Figure S2.** The gating scheme of Treg in total peripheral blood of ApoE<sup>-/-</sup> mice. We first gated the CD4<sup>+</sup> T cells and then gated CD25<sup>+</sup>Foxp3<sup>+</sup> in CD4<sup>+</sup> cells.



**Figure S3: Construction, and transduction efficiency of pLVX-shRNA1-mDnmt3b.** (A) structure of pLVX-shRNA1-mDnmt3b. (B) Transduction of viral vectors carrying *Dnmt3b* siRNA into isolated Tregs. (C) The mRNA level of *Dnmt3b* in spleen Treg of ApoE<sup>-/-</sup> mice transfected by viral vector carrying *Dnmt3b* siRNA. Abbreviations: Dnmt3b, DNA methyltransferases 3b.



**Figure S4:** The lesion area of aortic root was measured by Oil-red O Staining. \*  $P < 0.01$ , #  $P < 0.05$ .

Abbreviations: Dnmt3b, DNA methyltransferases 3b; WD, western diet.

**Table S1 Sequences of *FOXP3*-TSDR used in this study**

Assay type	Primer	Sequence
Mouse methylation specific qPCR	Forward	5'-TTGGGTTTTTTTTGGTATTTAAGAAA-3'
	Reverse	5'-CCCTATTATCACAACTAACTTAACC-3'
Bisulfite sequencing of mouse <i>Foxp3</i> -TSDR		TTGGGTTTTTTTTGGTATTTAAGAAAGATAGAATCG ATAGAATTTGGGTTTTGTATGGTAGTTAGATGGAC GTTATTTATTATATTCTTAGCATTATATTATTTATT TGGGTTTATTCTGTTATAGGATAGATTAGTTATTTT CGGAACGAAATTTGTGGGGTAGATTATTTGTTTTT TTTTTTTTTTTTTTGTTGTCTATGAAGTTAATGTAT TCGTCTTATGACTTAATGGTAGAAAAATTTGG TTAAGTTTAGGTTGTGATAATAGGG

CG: CpG site of bisulfite sequencing.

Abbreviations: *Foxp3*, Forkhead box P3; TSDR, Treg-specific demethylated region.

**Table S2 Primers sequence of quantitative RT-PCR**

Name	Primer	Sequence	Size
Homo DNMT3b	Forward	5'-GGGCATAAAGGTAGGAAAGT-3'	164bp
	Reverse	5'-TTCCGCCAATCACCAAGTCAA-3'	
Homo FOXP3	Forward	5'-CATTCCCAGAGTTCCTCCACA-3'	126bp
	Reverse	5'-CATTGAGTGTCCGCTGCTTC-3'	
Homo GAPDH	Forward	5'-TCAAGAAGGTGGTGAAGCAGG-3'	115bp
	Reverse	5'-TCAAAGGTGGAGGAGTGGGT-3'	
Mouse Dnmt3b	Forward	5'-TTGGTGCTCAAGGAGTTGGGTATTA-3'	217bp
	Reverse	5'-GGGCAGGATTGACGTTAGAGAGA-3'	
Mouse Foxp3	Forward	5'-CCTTTCACCTATGCCACCCTTATCC-3'	198bp
	Reverse	5'-TGCTCCCTTCTCGCTCTCCACT-3'	
Mouse Gapdh	Forward	5'-ATGGGTGTGAACCACGAGA-3'	229bp
	Reverse	5'-CAGGGATGATGTTCTGGGCA-3'	

Abbreviations: DNMT3b, DNA methyltransferases 3b; FOXP3, Forkhead box P3; GAPDH, glyceraldehyde-3-phosphate dehydrogenase; TSDR, Treg-specific demethylated region.