Supplementary Fig. S1. Target luciferase reporter assay. (A) Targeting luciferase reporter construct in pEZX-MT01 vector (Genecopoeia). (B) Luciferase reporter assays in HEK293 cells. *: p<0.05; **: p<0.01; *** p<0.001.
Supplementary Fig. S2. Endogenous expression levels of miR-146a and miR-146b in HRECs by qRT-PCR analysis (normalized to snRNA U6). *** $p<0.001$. 
**Supplementary Fig. S3.** Thrombin induced NF-κB downstream genes, VCAM1 and ICAM1, in a dosage dependent manner. n.s.: non-significant; *: \( p<0.05 \); **: \( p<0.01 \); ***: \( p<0.001 \); ****: \( p<0.0001 \). Statistical significance symbols above the data points denote comparisons to the levels of expression at dosages of 0 (bottom layer), 0.1 (2nd to the bottom layer), 0.5 (3rd to the bottom layer), 1.0 (4th to the bottom layer) and 2.5 U/ml (top layer).
Supplementary Fig.S4. miR-146 inhibits thrombin-induced NF-κB activation through targeting CARD10. qRT-PCR analysis on NF-κB downstream genes, VCAM1 (A) and ICAM1 (B), as well as adaptor proteins of GPCR-mediated NF-κB activation pathway, TRAF6 (C) and CARD10 (D). *: p<0.05; **: p<0.01; ***: p<0.001. n=3 for each condition.
Supplementary Fig. S5. Overexpression of miR-146 prevented IL-1β-induced NF-κB-dependent decrease of transendothelial electrical resistance (TEER). (A) Experimental timeline and TEER curves. HREC.s are transfected with miR-146a mimics or scrambled oligonucleotides (10 nM) as negative control. TEER was recorded 4 hours before and for 24 hours after IL-1β (10 ng/ml) treatment. (B) Normalized TEER at 8 hours (1) and 24 hours after IL-1β treatment (2). (C) IL-1β-induced decrease of TEER is NF-κB-dependent: One hour prior to IL-1β treatment, we treated the cells with NF-κB inhibitor, Bay11-7082. The result showed that IL-1β-induced decrease of TEER was completely blocked by Bay11-7082 treatment. **: $p<0.01$; ***: $p<0.001$. 
Supplementary Fig. S6. miR-146 is expressed in human Muller glial cells and is induced by thrombin treatment. A. Comparison of expression levels of miR-146a and miR-146b in human Muller glial cells and HRECs by qRT-PCR. In both Muller glia and HRECs, miR-146a higher expression levels than miR-146b. B. thrombin treatment induced miR-146 expression in Muller glial cells. *: p<0.05; **: p<0.01; ***: p<0.001; ****: p<0.0001.