

## Supplementary Appendix

### miR-146a-mediated suppression of the inflammatory response in human adipocytes

#### Authors:

Julian Roos<sup>1</sup>, Eveliina Enlund<sup>1</sup>, Jan-Bernd Funcke<sup>1</sup>, Daniel Tews<sup>1</sup>, Karlheinz Holzmann<sup>3</sup>, Klaus-Michael Debatin<sup>2</sup>, Martin Wabitsch<sup>1</sup>, and Pamela Fischer-Posovszky<sup>1</sup>

**Affiliations:** <sup>1</sup> Division of Pediatric Endocrinology and Diabetes, Department of Pediatric and Adolescent Medicine, University Medical Center Ulm, Ulm, Germany; <sup>2</sup> Department of Pediatric and Adolescent Medicine, University Medical Center Ulm, Ulm, Germany; <sup>3</sup> Core Facility Genomics, Ulm University, Ulm, Germany

#### Correspondence and reprint requests:

Dr. Pamela Fischer-Posovszky

Division of Pediatric Endocrinology and Diabetes

Department of Pediatrics and Adolescent Medicine

University Medical Center Ulm

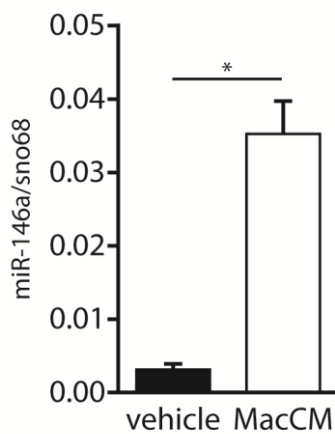
Eythstr. 24, 89075 Ulm, Germany

tel.: +49 731 500 57401

fax.: +49 731 500 57407

email: [pamela.fischer@uniklinik-ulm.de](mailto:pamela.fischer@uniklinik-ulm.de)

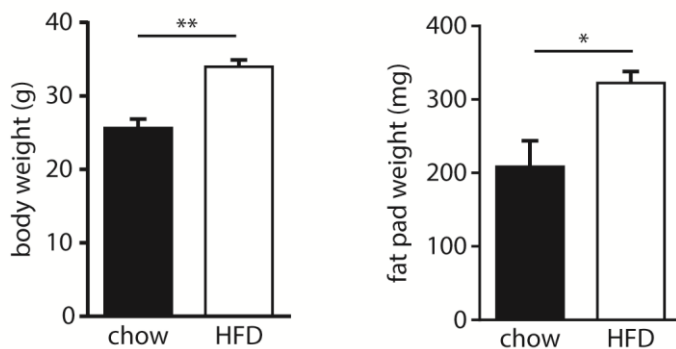
### Supplement Figure 1



### Supplement Figure 1: Array validation by qPCR

(A) SGBS adipocytes were treated with 10% of human THP-1 macrophage-conditioned media (MacCM) or the corresponding vehicle control. Total RNA was isolated after 48 h and reverse transcribed. The expression of miR-146a was assessed by qPCR with sno68 as reference gene. The results are displayed as mean and SEM of three independent experiments. Statistics: paired t-test, \* $p < 0.05$

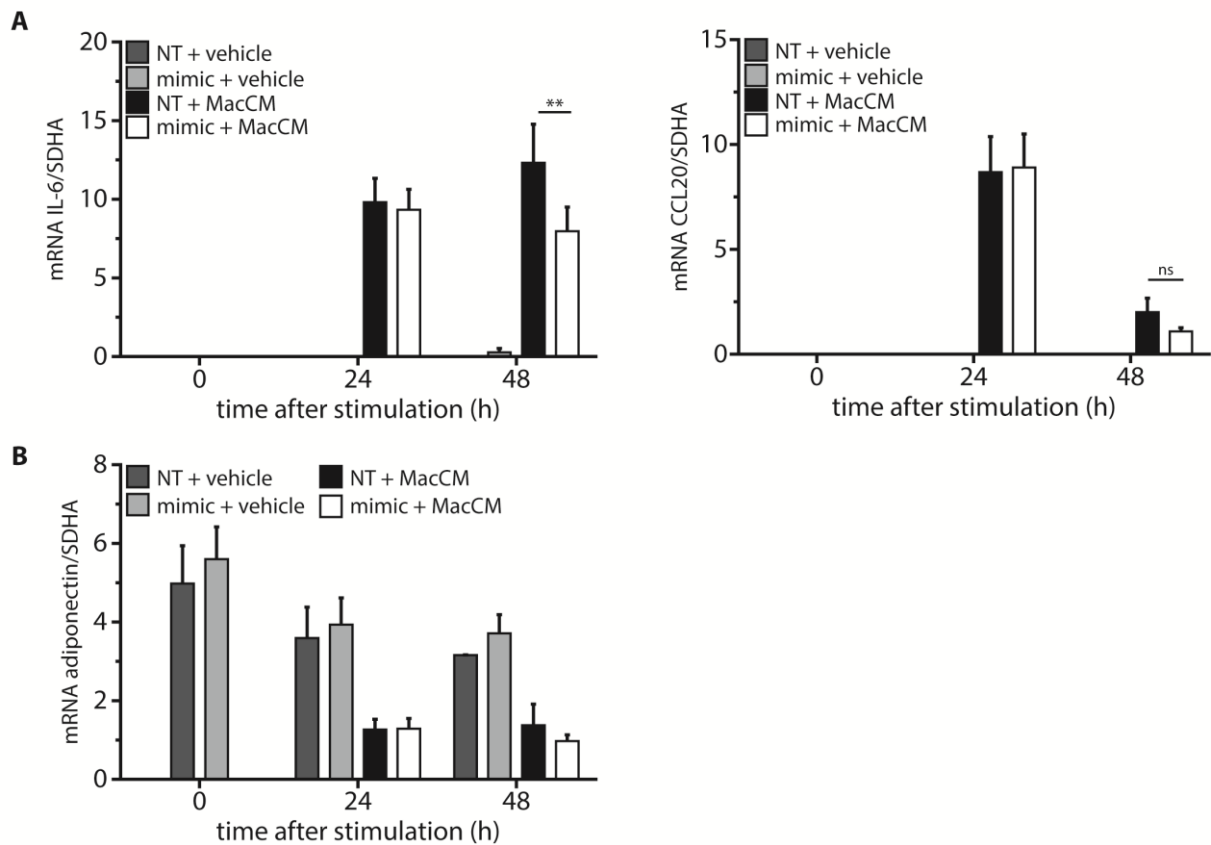
### Supplement Figure 2



### Supplement Figure 2: Body weight and fat pad weight of mice on chow and high fat diet

Body weight (A) and inguinal fat pad weight (B) of mice fed either a high fat (n=3) or chow diet (n=5) for 8 weeks. Data are displayed as mean and SEM. Statistics: paired t-test, \*  $p < 0.05$ , \*\*  $p < 0.01$

### Supplement Figure 3



### Supplement Figure 3: miR-146a down-regulates IL-6 and CCL20 expression

SGBS adipocytes were transfected with 20 nM miR-146a mimic or a non-targeting control siRNA (NT). (A & B) 48 h post-transfection, cultures were stimulated with 10% MacCM or vehicle control. RNA was isolated at 0, 24, and 48 h post-stimulation. IL-6, CCL20 and adiponectin mRNA expression was assessed by RT-qPCR with SDHA as reference gene. The results are displayed as mean and SEM of four independent experiments. Statistics: two-way ANOVA, ns = not significant, \*\*  $p < 0.01$