

NCM460 cells stably transfected as indicated with NTR1 (NCM460NTR1) were treated as indicated for 6 h with NT ( $10^{-7}$ M). (A & B) Cells were also treated as indicated with as-miR-210 or as-Scrambled, and (A) IL-6 and (B) TNF $\alpha$  levels of expression were assessed using qPCR. (C) MiR-210 levels of expression were assessed using qPCR. Statistical analysis was performed using student's t test. \*\*p<0.01, \*\*\*p<0.001

IL-6 a vs b: p=0.0056

a vs d: p=0.0036 TNFα a vs b: p=0.0007 a vs d: p=0.0037 miR-210 b vs d: p=0.0088 c vs d: p=0.0018



NCM460 cells stably transfected with NTR1 (NCM460NTR1) were treated as indicated with (A) NT ( $10^{-7}$ M, 6 h) and (B) NT ( $10^{-7}$ M, 6 h) in the presence or absence of pretreatment with PX-478 ( $40x10^{-6}$  M, 18 h) or with si-HIF-1a. (A) Equal protein of and total cell lysates were incubated with Dynal magnetic beads coupled as indicated with anti-HIF-1a monoclonal antibody or non-specific human IgG. HIF-1a bound prolyl-hydroxylase 2 (PHD2) was detected by Western Blot analysis of the resulting SDS elutes using anti-PHD2 antibody. Normalization was achieved via incubation of equal protein cell lysate with antibody bound beads between samples. (B) Western blot analysis of total cell lysates was performed using anti-HIF-1a monoclonal antibody followed by anti- $\beta$ -Actin polyclonal antibody serving as loading control. Data are represented by cropped images from the two separate original membranes.



HIF-1 $\alpha$ -OE, HIF-1 $\alpha$ -KO and control littermates (n=3 up to n=11) were treated as indicated with TNBS and total histological score of H&E staining of colon tissues was assessed.



(A) Mice received intracolonic enema of LNA-anti-miR-210 (10mg/kg), 48 h and 24 h before receiving intracolonic enema of TNBS (500mg/kg). 48 h later mice (n=8 per group) where sacrificed and (B) colon tissues where collected for RNA and protein isolation as well as immunohistochemistry (emersion in formalin). (C) Levels of expression for miR-210, let7a and let7b were assessed by qPCR. (D) Control (C57BL6/J) mice untreated (control) or received as indicated intracolonic enema of non-specific LNA-Scrambled (10mg/kg), 48 h and 24 h before receiving as indicated intracolonic enema of TNBS (500mg/kg). 48 h later mice (n=4) where sacrificed, colon tissues where collected for RNA isolation and expression levels of the inflammatory markers TNF $\alpha$  (a vs b: p=0.0438; a vs c: p=0.0039; b vs c: p=0.4101), IL-6 (d vs e: p=0.0006; d vs f: p=0.0874; e vs f: p=0.0874), and Cxcl1 (g vs h: p=0.0522; g vs i: p=0.0405; h vs i: p=0.6772) were assessed by qPCR. Statistical analysis was performed using student's t test. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001