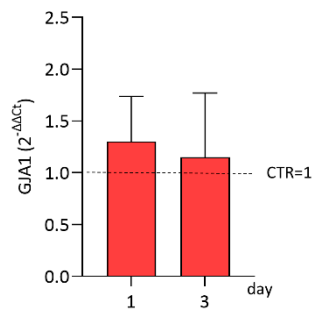
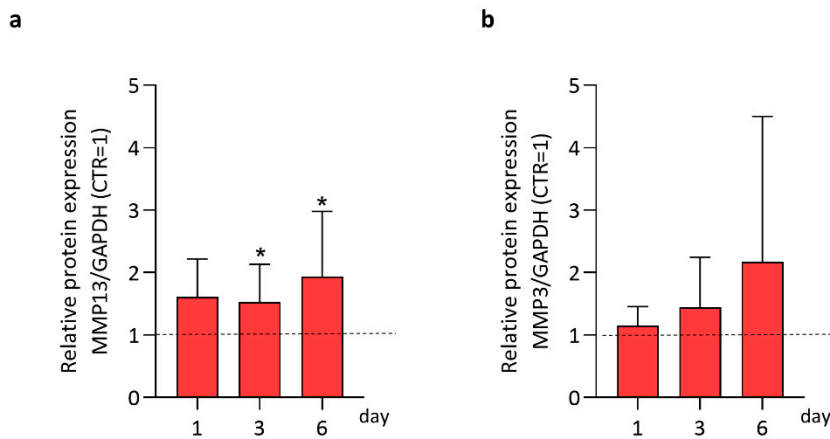


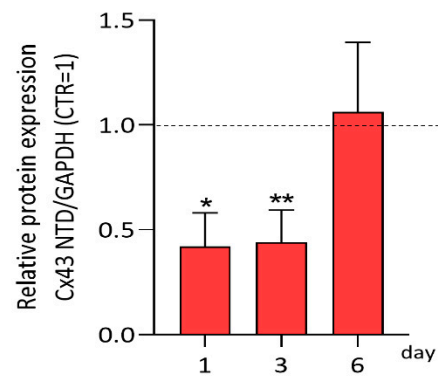
Supplementary figure legends



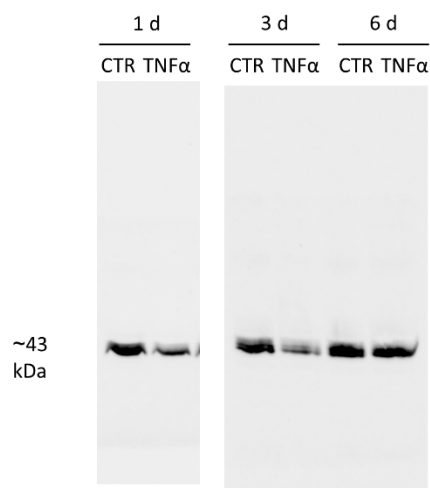
Supplementary Figure S1. Gene expression of GJA1 in TNF α -stimulated CH at day 1 and 3 analyzed by real-time PCR. Data (n gene expression of GJA1) are expressed as $2^{-\Delta\Delta C_t}$ (TBP was used as a housekeeping gene).



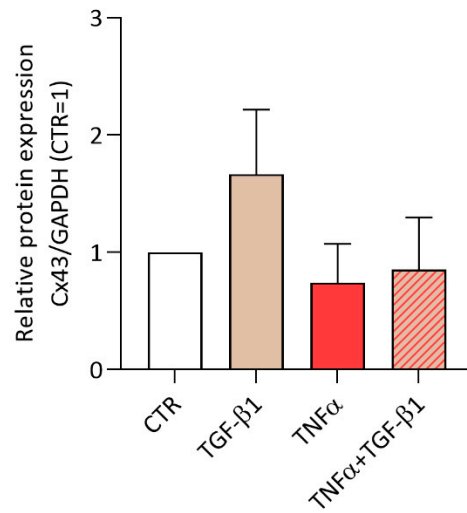
Supplementary Figure S2. Effect of TNF α on MMPs protein expression in CH. Quantification of the expression of MMP13 (above) and MMP3 (below) in TNF α -stimulated CH at day 1, 3 and 6 analyzed by Western blot. Data (n Effect of TNF α on MMPs protein expression in CH. PDH and expressed as relative values (CTR = 1). Statistical analysis was performed by paired t -test. Significance vs. appropriate CTR for each time point are shown as * $p < 0.05$.



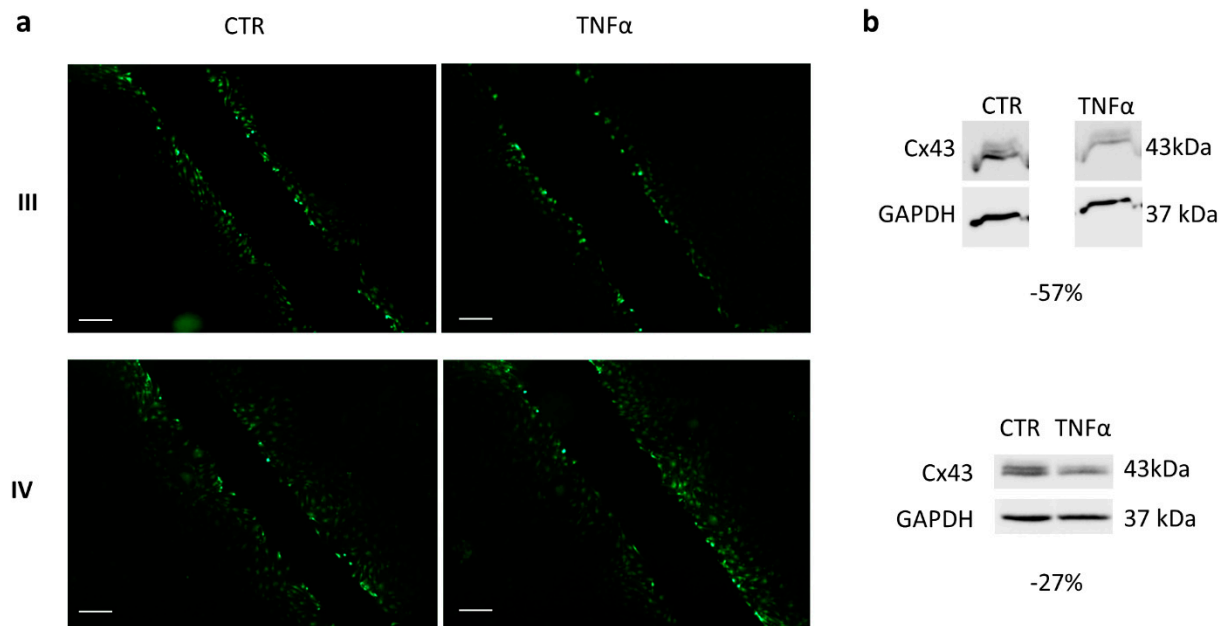
Supplementary Figure S3. Western blot analysis of the expression of Cx43 using an Ab raised against an epitope at the NTD in TNF α -stimulated CH at day 1, 3 and 6. Data (*n* Western blot analysis of the expression of Cx43 using an Ab raised against an epitope at the NTD in TNF α -stimulat. CTR is shown as * $p < 0.05$ and ** $p < 0.01$.



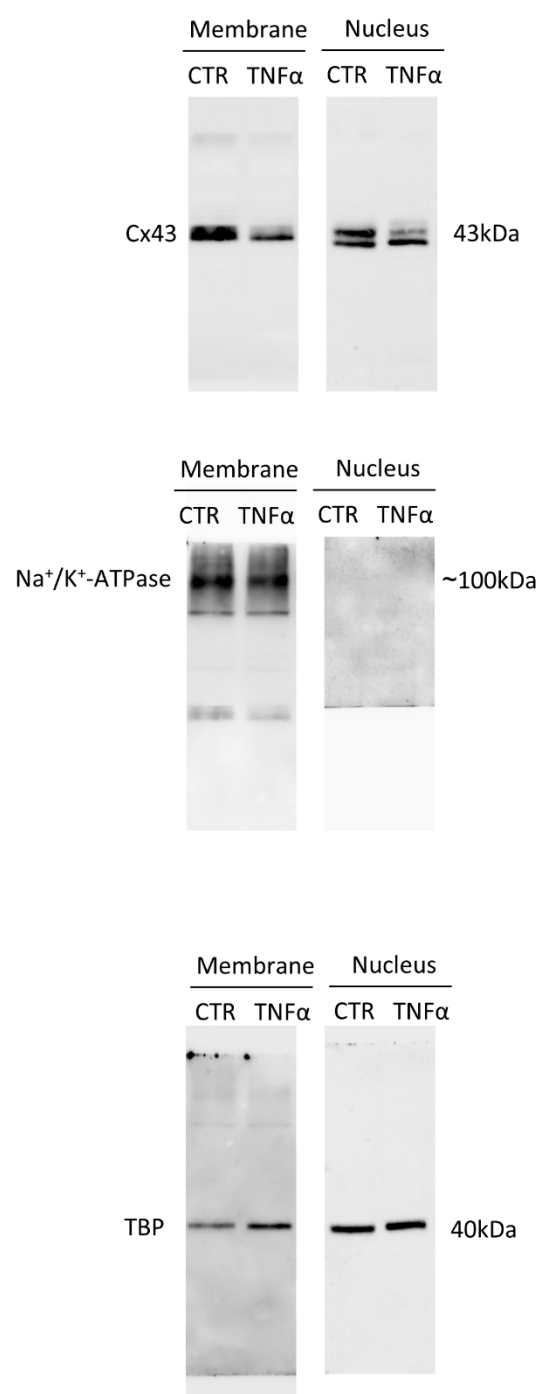
Supplementary Figure S4. Full Western blot image of Figure 1b. Cx43 expression was detected by an antibody raised against CTD.



Supplementary Figure S5. Quantification of the expression of Cx43 in CH treated with TNF α or/and TGF β at day 6 analyzed by Western blot. Data ($n = 6$ independent experiments) were normalized on GAPDH and expressed as relative values (CTR = 1).



Supplementary Figure S6. (a) Illustrative images of scrape loading/dye transfer (SL/DT) assay in CTR (**on the left**) and TNF α -treated (**on the right**) CH, at day 3. Scale bars: 200 μ m. (b) Immunoblot of each experiment is reported. The percentage of decrease in Cx43 protein expression in TNF α -treated CH compared to CTR is shown.



Supplementary Figure S7. Full Western blot image of Figure 5b.