

Fig. 15 Non-metric multidimensional scaling (NMDS) plot (a,b) of metagenomic sequencing data in mice treated or not with kefir and orally challenged with *S. Typhimurium*. Red dots represents wild type uninfected water (WNI) (a) and wild type uninfected kefir (KNI) (b), Gray dots represents wild type infected water (WI) (a) and wild type infected kefir (KI) (b), Black dots represents IL-10 knockout uninfected water (WNIKO) (a) and IL-10 knockout uninfected kefir (KNIKO) (b), Blue dots represents IL-10 knockout infected water (WIKO) and IL-10 knockout infected kefir (WIKO)(b). (c,d) Chao 1 Index; (e,f) Simpson Index (g,h) Shannon index . *Statistical differences between groups (n= 9 distributed in 3 pools with 3 mice per group) were analysed using ANOVA One-Way and Tukey's post test, in which (*) represents significant differences ($p < 0.05$).

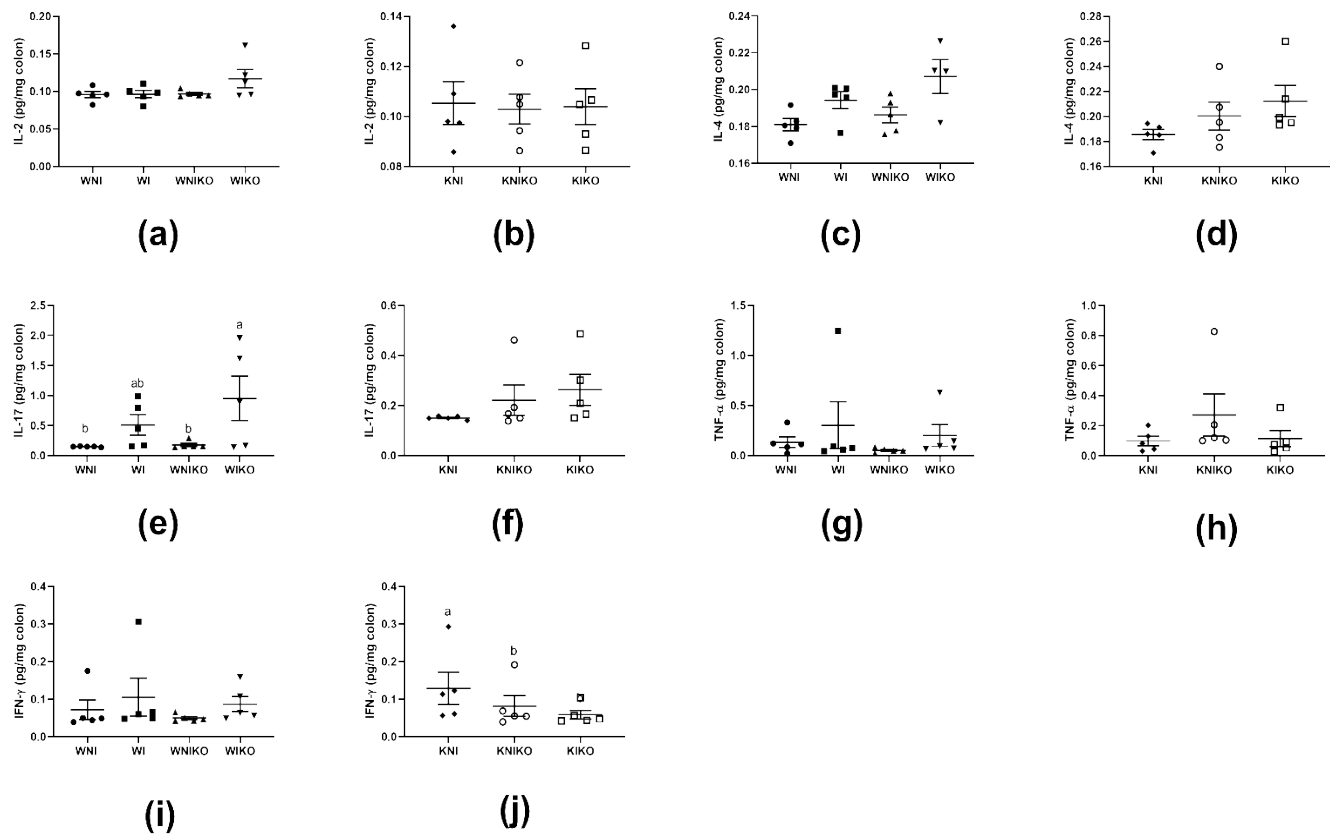


Fig.2S Cytokines concentration in the colon of mice treated or not with kefir and orally challenged with *S. Typhimurium*. (a,b) IL-2 (pg/mg colon); (c,d) IL-4 (pg/mg colon); (e,f) IL-17A (pg/mg colon); (g,h) TNF- α (pg/mg colon); (i,j) IFN- γ (pg/mg colon). Wild type uninfected water (WNI), wild type infected water (WI), wild type uninfected kefir (KNI), IL-10 knockout uninfected water (WNIKO), IL-10 knockout infected water (WIKO), IL-10 knockout infected kefir (KIKO), and IL-10 knockout uninfected kefir (KNIKO). Data are expressed as mean \pm mean standard error (n = 4-5 mice/group). Statistical differences between groups were analyzed using the ANOVA One-Way test followed by Tukey's post test, in which different letters represent significant differences with $p < 0.05$.

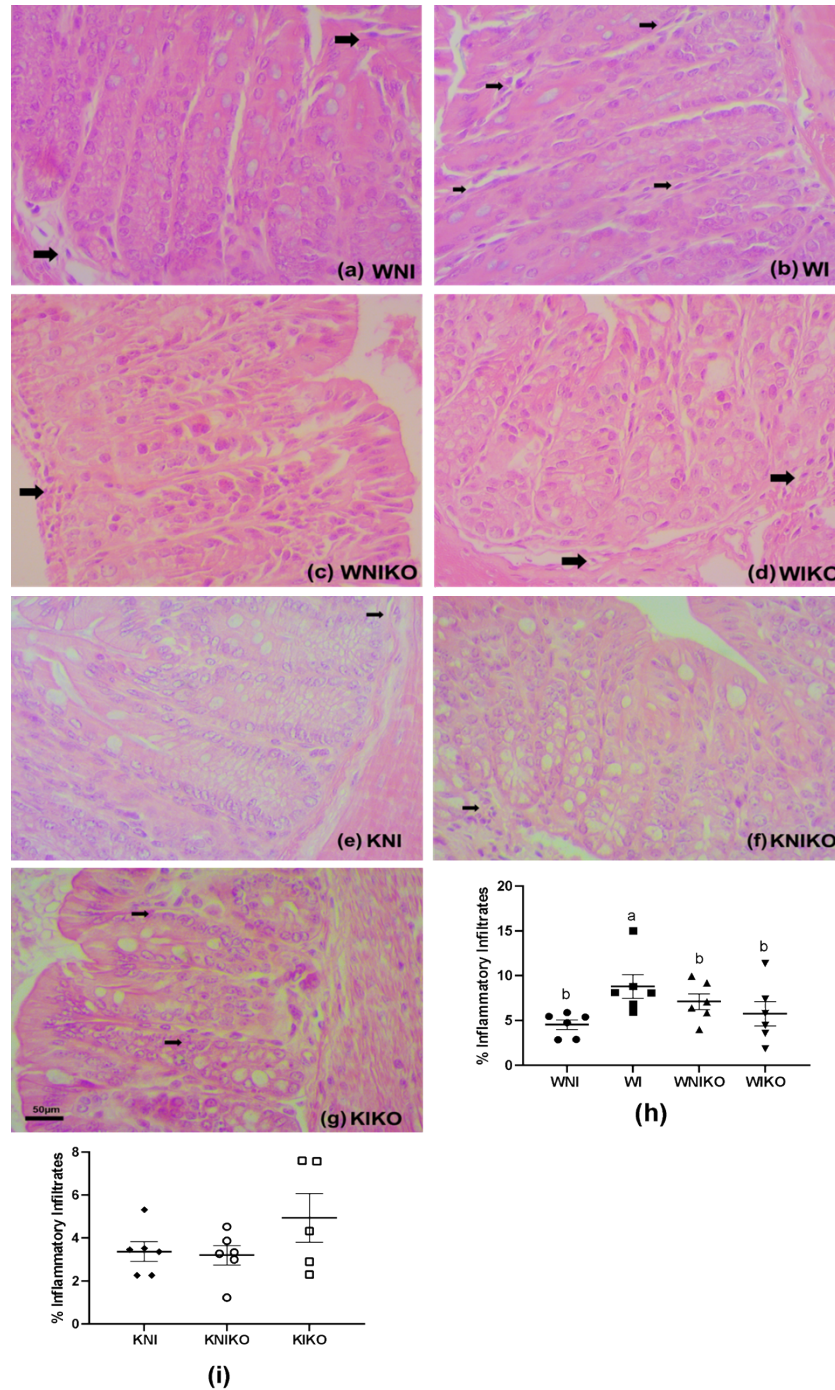


Fig. 3S Representative photomicrographs of colon sections and inflammatory infiltrates (%) of mice treated with water and orally challenged with *S. Typhimurium*. (a) Wild type uninfected water (WNI), (b) wild type infected water (WI), (c) IL-10 knockout uninfected water (WNIKO), (d) IL-10 knockout infected water (WIKO), (e) wild type uninfected kefir (KNI), (f) IL-10 knockout uninfected kefir (KNIKO), and (g) IL-10 knockout infected kefir (KIKO). (h) inflammatory infiltrates (%) of mice treated with water, (i) inflammatory infiltrates (%) of mice treated with kefir. Slides stained with hematoxylin and eosin (H&E) at $\times 40$ magnification. Scale bar = 50 μ m. Black arrows indicate the presence of inflammatory infiltrates in the colon. Data are expressed as mean \pm mean standard error ($n = 6$ mice/group). Statistical differences between groups were analyzed using the ANOVA One-Way test followed by Tukey's post test, in which different letters represent significant differences with $p < 0.05$.

