

[Supplement]

The alleviation of gut microbiota-induced depression and colitis in mice by anti-inflammatory probiotics NK151, NK173, and NK175

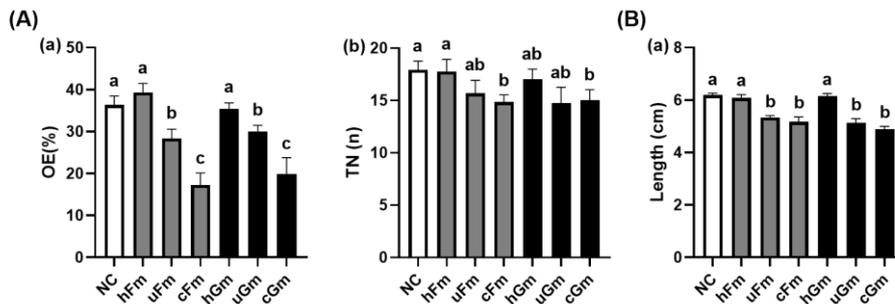


Figure S1. iFm (uFm and cFm) and iGm (uGm and cGm) caused depression-like behaviors and colitis in mice. (A) Effects on depression-like behaviors in the EMPT (a) and LDTT (b). (B) Effects on the colon shortening (a). Data values are as mean \pm SEM ($n = 10$). Means with same letters are not significantly different ($p < 0.05$).

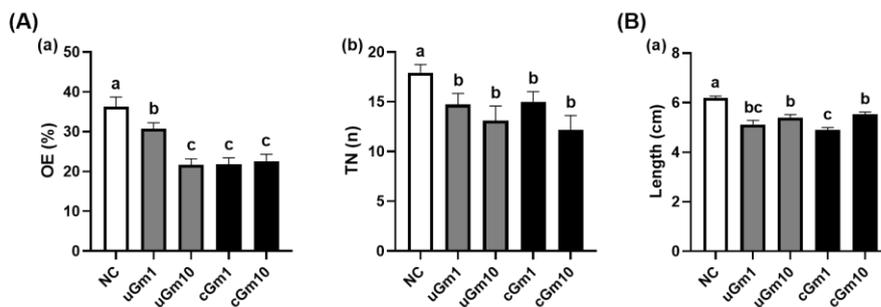


Figure S2. Effects of iGm1 and iGm10 on the occurrence of depression and colitis in mice. (A) Effects on depression-like behaviors in the EMPT (a) and LDTT (b). (B) Effects on the colon length (a). Data values are as mean \pm SEM ($n = 8$). Means with same letters are not significantly different ($p < 0.05$).

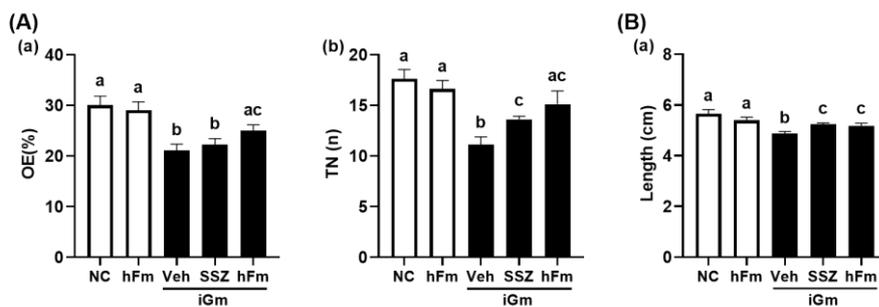


Figure S3. Effects of sulfasalazine and hFm on iGm-induced depression-like behaviors and colitis in mice. (A) Effects on depression-like behaviors in the EMPT (a) and LDTT (b). (B) Effects on the colon shortening (a). Data values are as mean \pm SEM ($n = 8$). Means with same letters are not significantly different ($p < 0.05$).

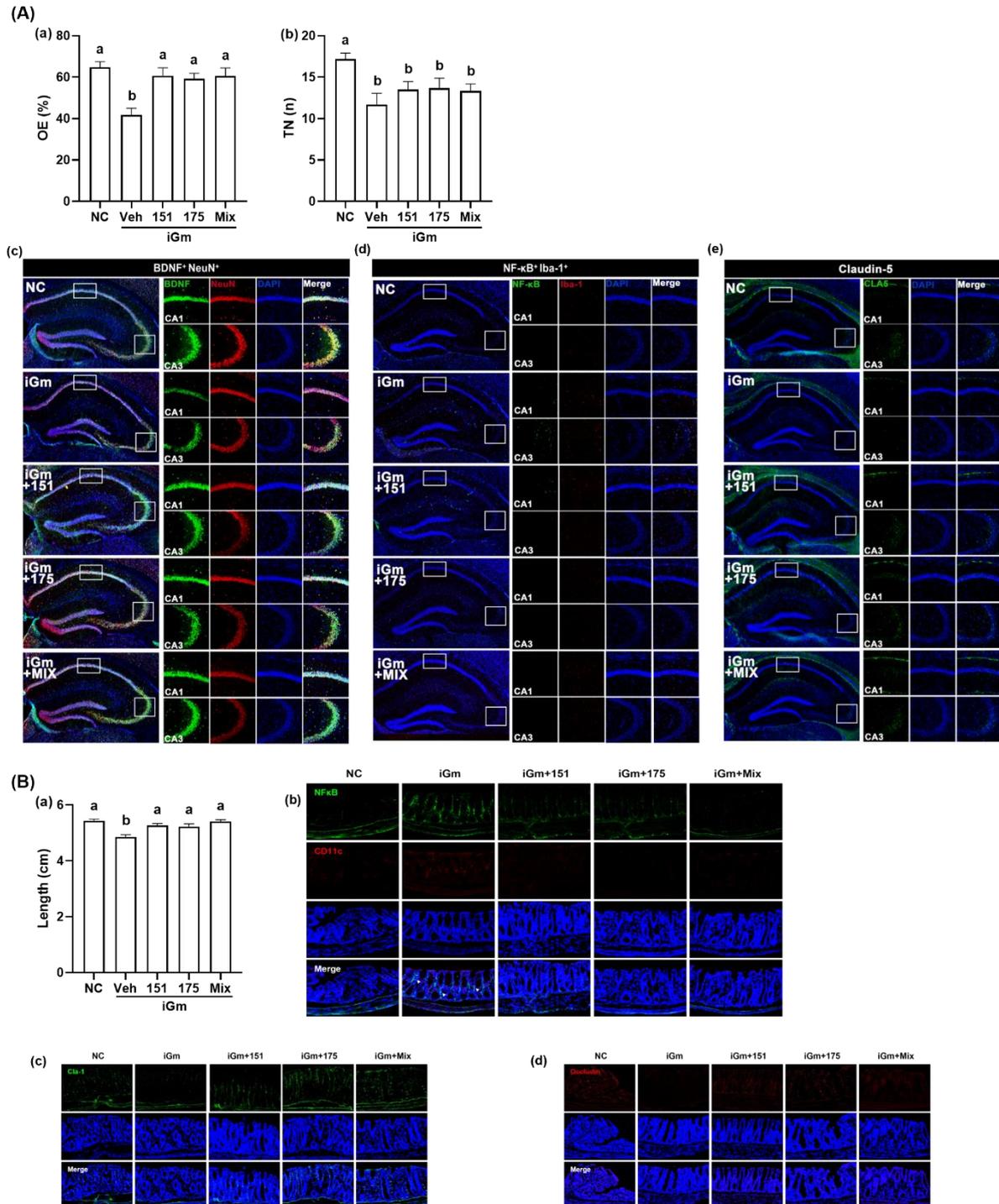


Figure S4. Effects of NK151 and NK175 on iGm-induced depression-like behaviors and colitis in mice. (A) Effects on depression-like behaviors in the EMPT (a) and LDTT (b) and BDNF⁺NeuN⁺ (c) and NF- κ B⁺Iba1⁺ (d), and claudin-5⁺ (e) cell populations in the hippocampus. (B) Effects on colon shortening (a), NF- κ B⁺CD11c⁺ (b), claudin-1⁺ (c), and occludin⁺ cell populations (d) in the colon. Data values are as

mean \pm SEM ($n = 8$). Means with same letters are not significantly different ($p < 0.05$).

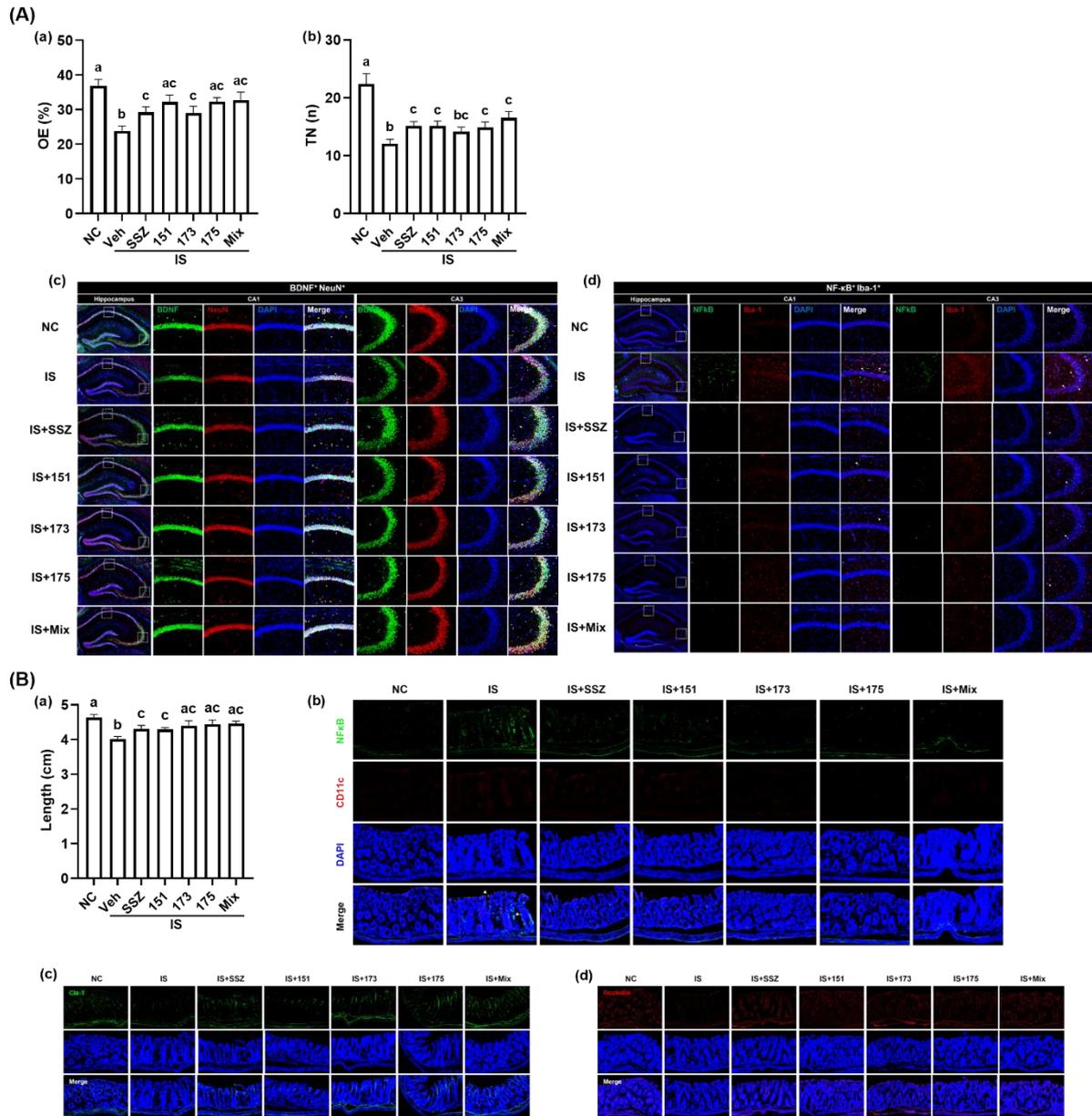


Figure S5. Effects of NK151, NK173, and NK175 on IS-induced depression-like behaviors and colitis in mice. (A) Effects on depression-like behaviors in the EMPT (a) and LDTT (b) and BDNF⁺NeuN⁺ (c) and NF- κ B⁺Iba1⁺ cell populations (d) in the hippocampus. (B) Effects on colon shortening (a), NF- κ B⁺CD11c⁺ (b), claudin-1⁺ (c), and occludin⁺ cell populations (d) in the colon. Data values are as mean \pm SEM ($n = 8$). Means with same letters are not significantly different ($p < 0.05$).