

Supplementary Materials

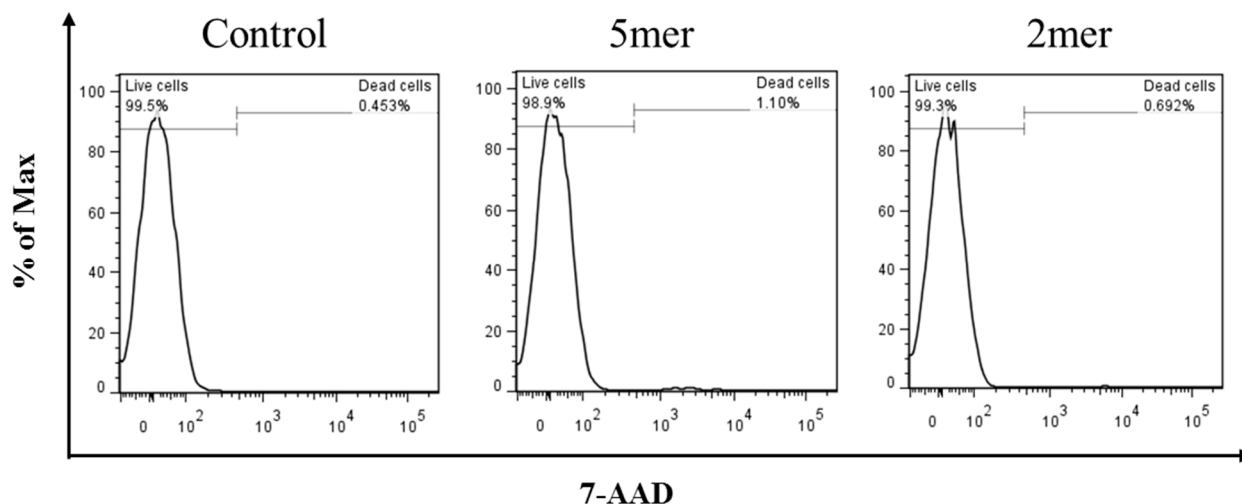


Figure S1. Toxicity of pentameric or dimeric procyanidin on the activated CD4⁺ T cells. To assess toxicity of procyanidins, splenic CD4⁺ T cells stimulated with an anti-CD3 ϵ monoclonal antibody (mAb) in the presence of pentameric or dimeric procyanidin (25 μ M) for 24 h, followed by staining with 7-Aminoactinomycin D (7-AAD). The group without oligomeric procyanidins treatment was indicated as control.

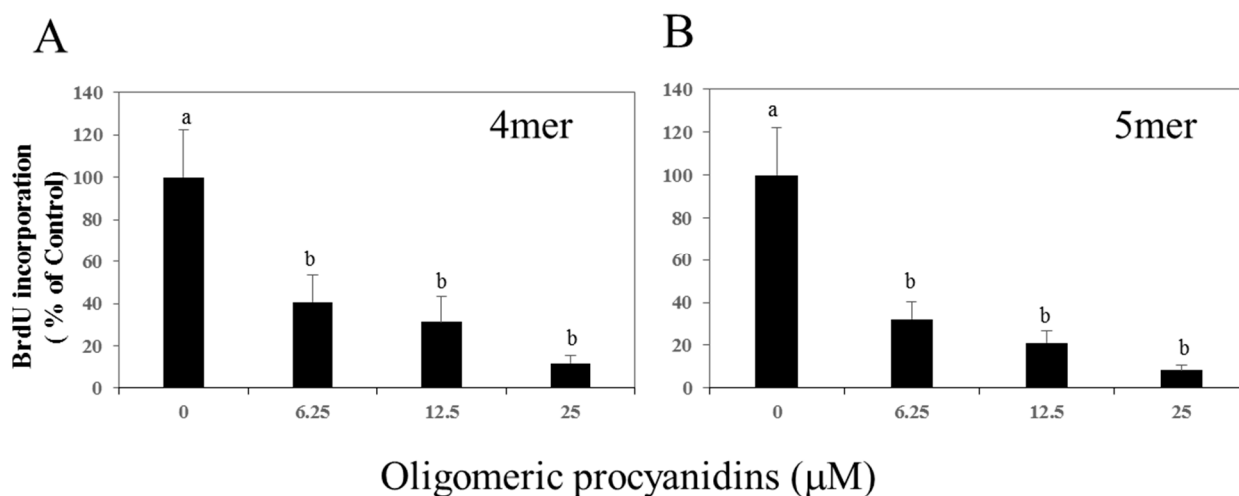


Figure S2. Dose-dependent effects of oligomeric procyanidins on cell proliferation of activated CD4⁺ T cells. Splenic CD4⁺ T cells were stimulated with an anti-CD3 ϵ monoclonal antibody in the presence of tetrameric (A) or pentameric (B) procyanidins (0–25 μ M). Cell proliferation was evaluated by measuring the BrdU incorporation after 72 h of stimulation. The group without oligomeric procyanidins treatment (0 μ M) was indicated as control. The data shown are the means \pm SD from three independent experiments. Values not sharing a common letter (a, b) differ significantly at $p < 0.05$ by the Tukey-Kramer multiple comparison test.

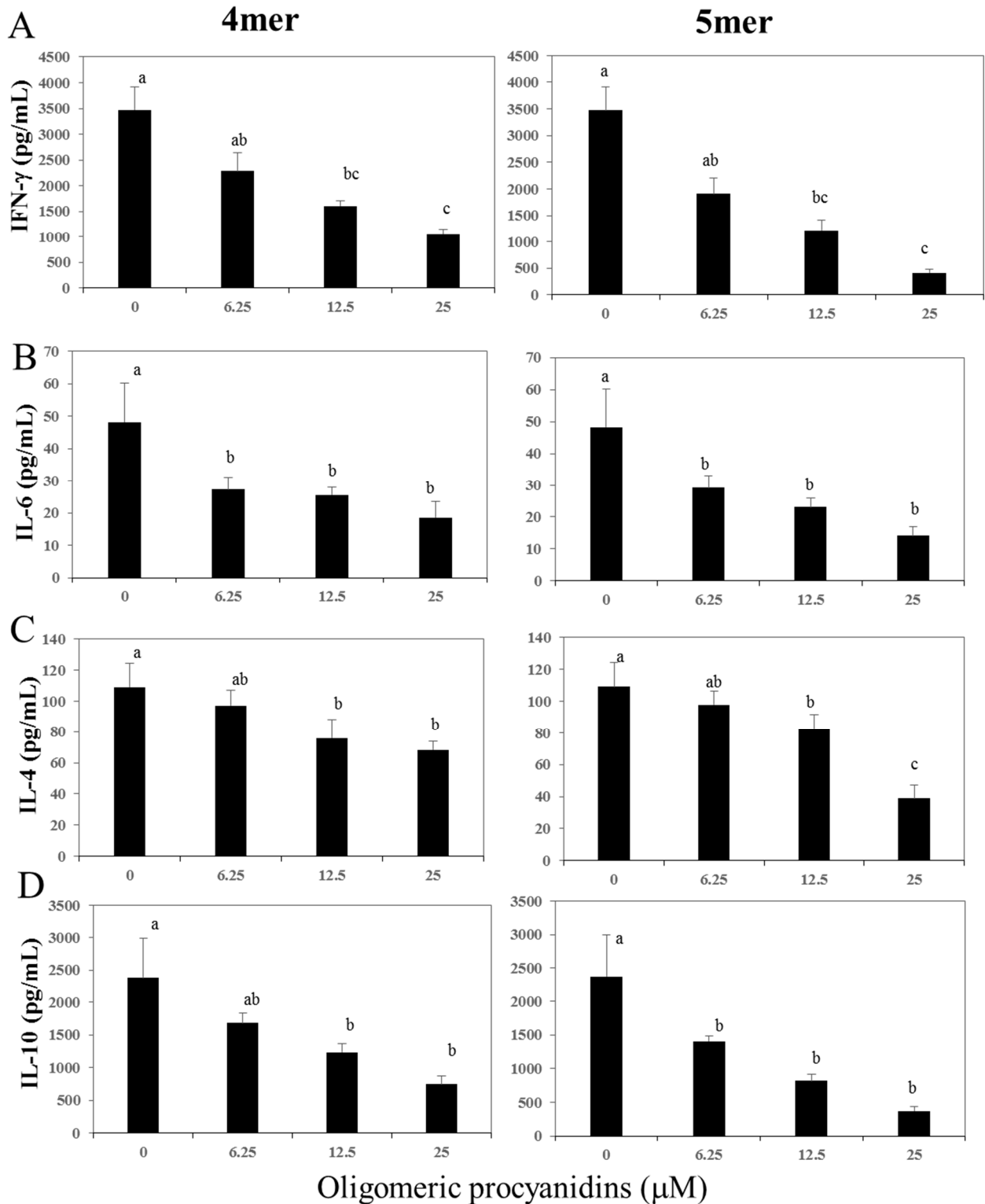


Figure S3. Dose-dependent effects of oligomeric procyanidins on the production of the effector cytokines, interferon (IFN)- γ (A); interleukin (IL)-6 (B); IL-4 (C); and IL-10 (D) by activated CD4⁺ T cells. Splenic CD4⁺ T cells were stimulated with an anti-CD3 ϵ monoclonal antibody in the presence of tetrameric or pentameric procyanidins (0–25 μM). The data shown are the means \pm SD from triplicate cultures. Values not sharing a common letter (a, b, c) differ significantly at $p < 0.05$ by the Tukey–Kramer multiple comparison test.

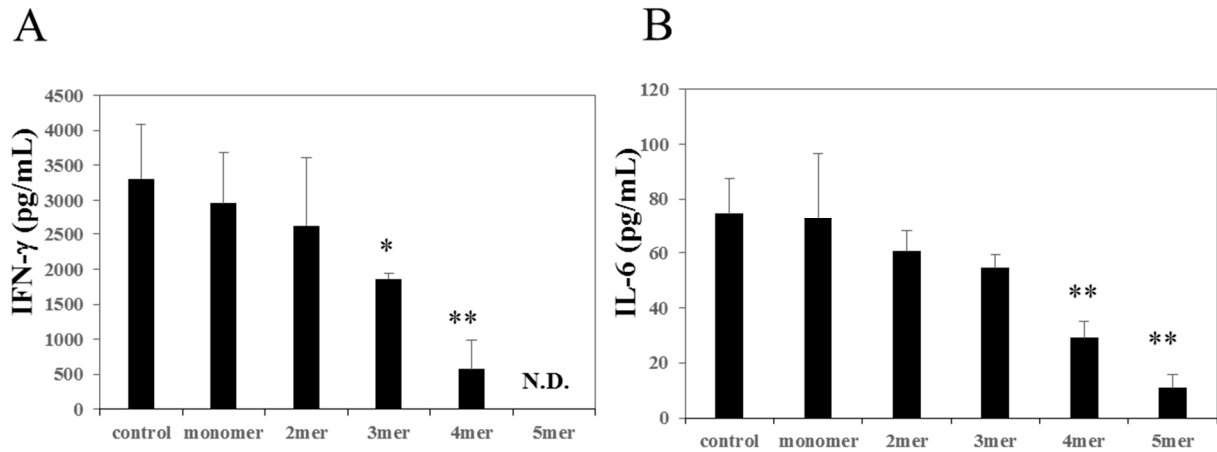


Figure S4. Effects of oligomeric procyanidins on the production of the effector cytokines, interferon (IFN)- γ (A) and interleukin (IL)-6 (B) of activated splenocytes from naïve DO11.10 mice. Pooled splenocytes were stimulated with 7.5 μ M of ovalbumin (OVA) in the presence of oligomeric procyanidins (25 μ M). The data shown are the means \pm SD from triplicate cultures. Statistical comparisons were performed using analysis of variance with Dunnett's multiple comparison of means test. Significance is relative to a negative control (* $p < 0.05$, ** $p < 0.01$).