# Supplement data

**Effects of CCP on protein levels of cytokines of peritoneal macrophage in BALB/c mice**

The protein levels of IL-2, IL-6, TNF-α and IFN-α were evaluated by using commercial ELISA kits (R&D Systems, Minneapolis, MN) according to the manufacturer's instructions. The absorbance was measured in an ELIASA at 450 nm. The concentrations of cytokines were calculated according to the standard curve using each of the recombinant cytokines in the ELISA kits.

As shown in Fig. S1, the levels of IL-2, IL-6, TNF-α and IFN-α in peritoneal macrophages of immunosuppressed mice were significantly suppressed by CTX compared with the normal group ($p<0.01$). Compared to CTX groups, the IL-2, IL-6, TNF-α and IFN-α were promoted in CCP treatment groups. In the preventive treatment groups, the P-M and P-H groups (120 and 240 mg kg$^{-1}$d$^{-1}$) showed significantly enhanced of IL-2, IL-6, TNF-α and IFN-α compared with P-CTX group. Meanwhile, IL-2, IL-6, TNF-α and IFN-α levels in T-M and T-H (120 and 240 mg kg$^{-1}$d$^{-1}$) groups were significantly higher than that of T-CTX group. The result suggested that CCP could reverse the down-regulation of cytokines induced by CTX which consistent with the result of qRT-PCR.
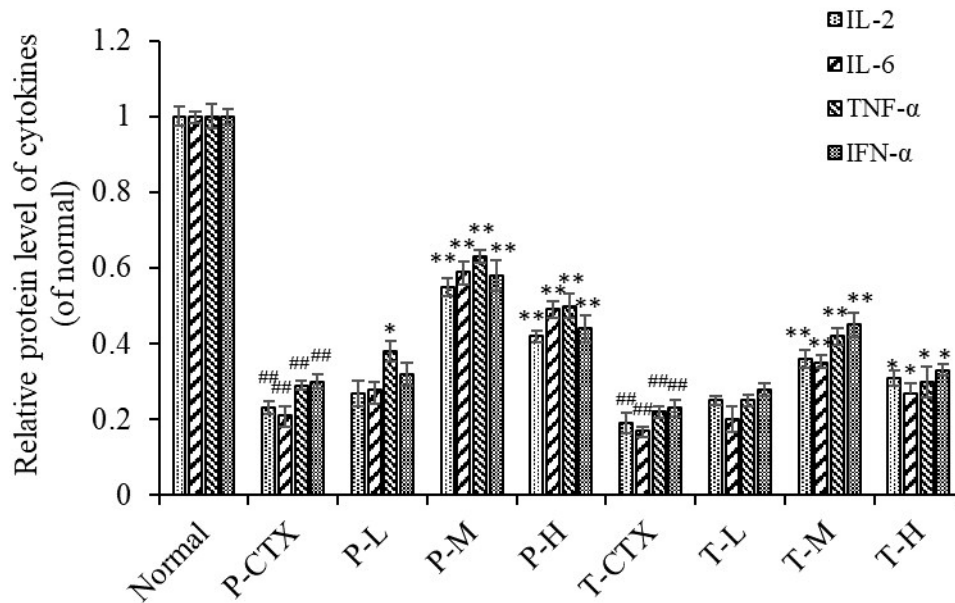
Fig. S1. Determinations of protein expression of cytokines (IL-2, IL-6, TNF-α and IFN-α) effected

by CCP in peritoneal macrophage of CTX- induced immunosuppressive mice by ELISA assay.

Normal: normal group; P-CTX: preventive treatment CTX group; P-L: preventive treatment

CTX＋CCP group (60 mg kg-1 d-1); P-M: preventive treatment CTX＋CCP group (120 mg kg-1

d-1); P-H: preventive treatment CTX＋CCP group (240 mg kg-1 d-1); T-CTX: therapeutic

treatment CTX group; T-L: therapeutic treatment CTX＋CCP group (60 mg kg-1 d-1); T-M:

therapeutic treatment CTX＋CCP group (120 mg kg-1 d-1); T-H: therapeutic treatment CTX＋

CCP group (240 mg kg-1 d-1). #$P < 0.05$, ##$P < 0.01$ *vs.* normal group, *$P < 0.05$, **$P < 0.01$ *vs.*

model groups (P-CTX or T-CTX), respectively. Data were expressed as means ± SE, n=10.