**Supplementary Figure Legends**

**Figure S1 | GSK843 induces the accumulation of CD11b+Gr-1+ cells in the liver and spleen of ConA-treated mice.** Mice were pre-treated i.p. with GSK843 (0.5mg/kg; MCE, USA) or vehicle 1 hour before ConA (15 mg/kg) administration; mice were sacrificed 12 hours later after ConA injection and livers and spleen were collected. Representative dot-plots (left) and the histograms (right) show the percentages of CD11b+Gr-1+ cells in HMNCs and spleen cells of mice treated with GSK843+ConA or ConA alone. All the values are shown as mean ± SD. ns., not significant; *P < 0.05, **P < 0.01.

**Figure S2 | The effect of B6-8C5 antibody on Gr-1+ MDSCs depletion.** Hepatic mononuclear cells (HMNCs) and spleen cells from IgG+GSK872+ConA treated- and aGr1+GSK872+ConA treated-mice were assayed by FACS. (A) Percentages of CD11b+Ly6GhiLy6Clo cells (PMN-MDSCs) and CD11b+Ly6GloLy6Chi (Mo-MDSCs) cells in CD45+CD11b+ cells were analyzed by flow cytometry. The percentages (up) and absolute cell numbers (down) of PMN-MDSCs and Mo-MDSCs in HMNCs (B) and spleen cells (C). All the values are shown as mean ± SD. ns., not significant; *P < 0.05, **P < 0.01.

**Figure S3 | In vivo depletion of Gr1-positive MDSCs aggravates ConA induced liver injury.** Mice were given anti-Gr1 depleting antibody (250μg/ mice) or control IgG (250μg) 36 hours before ConA(15mg/kg) treatment, mice were sacrificed 12 hours after ConA-treatment and blood and liver samples were collected. (A) Percentages of CD11b+Gr-1+MDSCs and its subtypes (PMN-MDSCs and Mo-MDSCs) cells in livers were analyzed by flow cytometry. (B)The Serum levels of ALT/AST in two groups. (C) Representative photomicrographs (H&E staining; original magnification 200x; scale bars, 50 um) of livers in two groups. All the values are shown as mean ± SD. ns., not significant; *P < 0.05, **P < 0.01.
Figure S1
Figure S2
Figure S3

A

B

C

Supplementary Material