



**Supplemental Figure 1**. Genetically blocking *Tlr9* signaling showed beneficial effects on sepsis. Wild-type (WT), *Tlr9<sup>CpG1/GpG1</sup>*, and *Tlr9<sup>-/-</sup>* mice were subjected to CLP. A: Seven-day survival after CLP. Data are from two separate experiments, n=20. Statistical difference was tested using the log-rank test. \**p*<0.05. B-C: Blood and peritoneal lavage fluid (PLF) were collected at 18 hours after CLP. Bacterial counts in (B) peritoneal lavage fluid (PLF), and (C) blood. Data are from two separate experiments. Symbols represent for individual mice. Statistical difference was tested using a nonparametric Mann Whitney U statistic. \**p*<0.05. D & E: Plasma cytokines levels. Blood was collected at18 hours after CLP. Plasma (D) IL-6 and (E) IL-1β concentrations were measured by ELISA. Data are means ± SD from 2 separate experiments. Symbols represent for individual mice. Statistical difference was tested using a number swere measured using cellometer. Data are means ± SD from 2 separate experiments. Symbols represent for individual mice. Statistical difference was tested using 1- way ANOVA with Bonferroni's post hoc analysis, \**p*<0.05, *p*<0.01.

Supplemental Figure 2



**Supplemental Figure 2.** TLR9 expression in peritoneal immune cell before and after CLP. WT and *Tlr9<sup>-/-</sup>* mice were subjected to CLP. PLF was collected at18 hours after CLP. TLR9 expression in indicated peritoneal cells. Mean Fluorescence Intensity (MFI) for TLR9 expression was measured by flow cytometry.



**Supplemental Figure 3.** Peritoneal B cells were depleted in *Tlr9<sup>-/-</sup>* mice. *Tlr9<sup>-/-</sup>* mice were treated with CD19 neutralizing antibodies (10mg/mouse) or control IgG for 24 hours. PLF was collected. Percent of peritoneal B cells was measured by flow cytometry



**Supplemental Figure 4.** Characterization of B cell specific *Tlr9*<sup>-/-</sup> (*Cd19-Tlr9*<sup>-/-</sup>) mice. WT, *Tlr9*<sup>-/-</sup> mice were subjected to CLP without antibiotic treatment. PLF was collected from WT, *Tlr9*<sup>-/-</sup>, Flox, and *Cd19-Tlr9*<sup>-/-</sup> mice. TLR9 expression in B cells and DC was measured by flow cytometry.



**Supplemental figure 5**. TLR9 in B cells is dispensable for sepsis. A-G: Flox and Cd19-Tlr9-/mice were subjected to CLP. Plasma and PLF was collected at18 hours after CLP. Bacterial counts in (A) peritoneal lavage fluid (PLF), and (B) blood. Data are from two separate experiments. Symbols represent for individual mice. Statistical difference was tested using a nonparametric Mann Whitney U statistic. (C) Plasma IL-6 levels. (D) Peritoneal total cell count. (E) Peritoneal B cell and B-1 cell number; (F) Plasma IgM levels, (G) Peritoneal CXCL13 levels. Data are means ± SD from 2 separate experiments. Symbols represent for individual mice. Statistical difference was tested using student T test. \*p<0.05. H: Sorted peritoneal B-1 cell were culture and treated with indicated TLR ligands (ODN1585: 5μM, LPS: 1μg/mL) for 18 hours. IgM levels in media was assessed using ELISA. Data are means ± SD from 1 representative experiment. The experiments have been performed 3 times. Symbols represent for individual mice. Statistical difference was tested using unpaired, 2-tailed Student *t* tests.

Supplemental Figure 6



**Supplemental Figure 6.** TLR9 is constitutively expressed in mouse and human FRCs. The purity of cultured FRCs was assessed using flow cytometry. Numbers indicate percent of FRCs (CD45<sup>-</sup>, CD31<sup>-</sup> and Podoplanin+). TLR9 expression in mouse FRCs.

Supplemental table1: Antibodies for flowcytometry

| Species | Antibody          | Company    | Catalog Number |
|---------|-------------------|------------|----------------|
| Mouse   | Cd45-BUV395       | BD         | 8037968        |
| Mouse   | Cd11b-PE          | BD         | 557397         |
| Mouse   | F4/80-ef450       | eBio       | 48-4801-82     |
| Mouse   | Ly6G-APC-CY7      | BD         | 560600         |
| Mouse   | Cd11c-PE-CY5      | eBio       | 15-0114-82     |
| Mouse   | МНСП-РЕ-СҮ7       | invitrogen | 4332615        |
| Mouse   | Cd19-BUV737       | BD         | 564296         |
| Mouse   | Cd3e-FITC         | eBio       | 11-0031-82     |
| Mouse   | Cd5-ef450         | eBio       | 48-0051-82     |
| Mouse   | Cd34-PE           | Biolegend  | 128609         |
| Mouse   | TIr9-PE           | BD         | 565640         |
| Mouse   | TIr9 isotope-PE   | BD         | 554880         |
| Mouse   | IgM-PE-CY7        | eBio       | 25-5790-82     |
| Mouse   | Cd31PE-CY7        | eBio       | 25-0311-81     |
| Mouse   | Podoplanin-APC    | Biolegend  | 127410         |
| Human   | CD45-PE-CY5       | BD         | 555484         |
| Human   | PODOPLANIN-BUV395 | BD         | 747630         |
| Human   | CD31-APC-CY7      | BD         | 563653         |
| Human   | TLR9-PE           | BD         | 560425         |
| Human   | TLR9 isotope-PE   | BD         | 554689         |

Supplemental table2: Primers for PCR

| Species | Gene<br>name | Forward                 | Reverse                 | Company    |
|---------|--------------|-------------------------|-------------------------|------------|
| Mouse   | Ccl2         | GCATTAGCTTCAGATTTACGGGT | TTAAAAACCTGGATCGGAACCAA | Invitrogen |
| Mouse   | Ccl21        | AAGGCAGTGATGGAGGGG      | CGGGGTAAGAACAGGATTG     | Invitrogen |
| Mouse   | Ccl19        | AGGTAGCGGAAGGCTTTCAC    | CTGCTTCAGATTATCTGCCAT   | Invitrogen |
| Mouse   | Cxcl13       | QT00107919              |                         | QIAGEN     |
| Mouse   | Cxcl2        | CCAACCACCAGGCTACAGG     | GCGTCACACTCAAGCTCTG     | Invitrogen |
| Mouse   | Cxcl3        | QT00151599              |                         | QIAGEN     |
| Mouse   | Cxcl5        | CGCTTCTTTCCACTGCGAGTGC  | CTCAGTCATAGCCGCAACCGAGC | Invitrogen |
| Mouse   | Gapdh        | AACTTTGGCATTGTGGAAGG    | ACACATTGGGGGTAGGAACA    | Invitrogen |
| Human   | CCL20        | QT00012971              |                         | QIAGEN     |
| Human   | CXCL13       | GCTTGAGGTGTAGATGTGTCC   | CCCACGGGGCAAGATTTGAA    | Invitrogen |
| Human   | CXCL2        | QT00013104              |                         | QIAGEN     |
| Human   | CXCL3        | CGCCCAAACCGAAGTCATAG    | GCTCCCCTTGTTCAGTATCTTT  | Invitrogen |
| Human   | CXCL5        | QT00203686              |                         | QIAGEN     |
| Human   | GAPDH        | GAAGGTGAAGGTCGGAGTC     | GAAGATGGTGATGGGATTTC    | Invitrogen |