



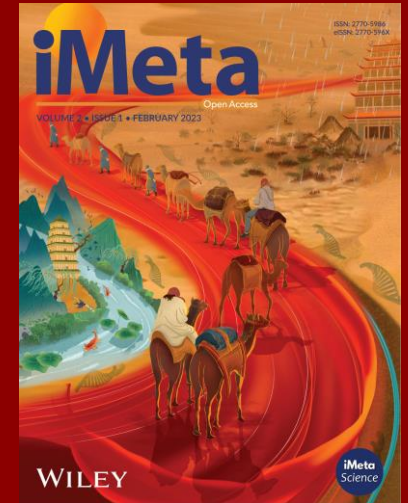
肠道亚油酸介导嗜黏蛋白阿克曼菌在小鼠模型中抗李斯特菌感染

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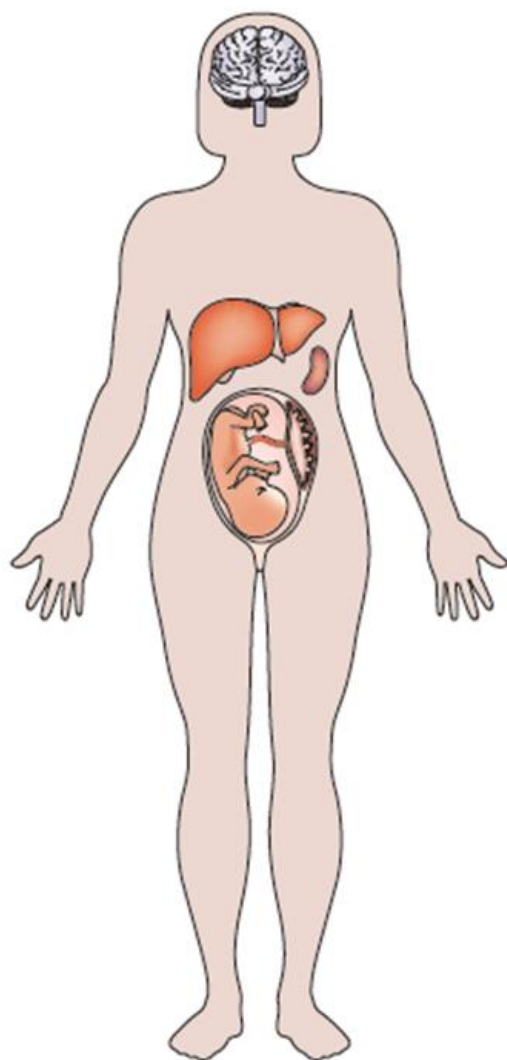
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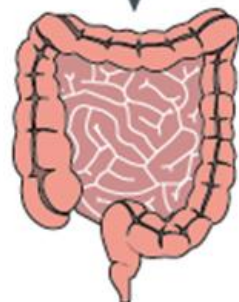


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背景简介



Listeria monocytogenes-contaminated food



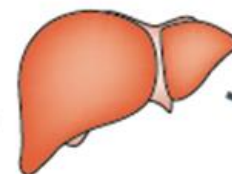
Intestine

Lymph node

Blood vessel

Bloodstream

Liver



Brain



Placenta

Fetus

Spleen

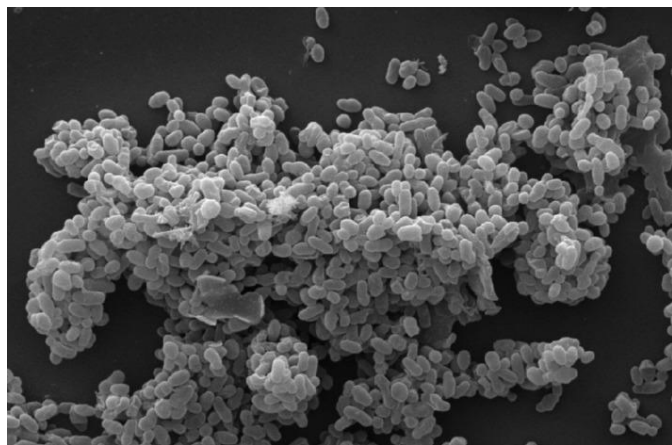


Listeria monocytogenes

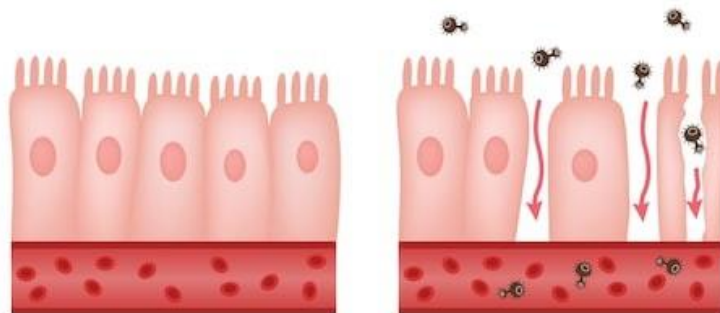
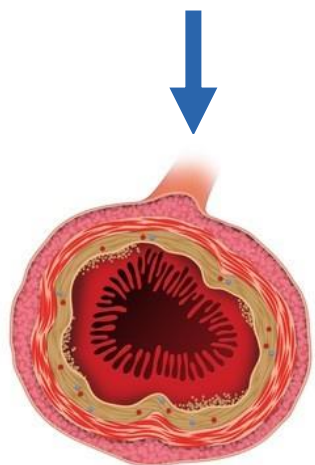




背景简介



嗜黏蛋白阿克曼菌

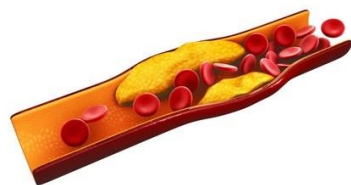


安全



肥胖

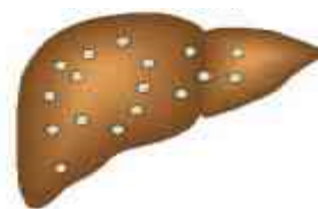
功效



动脉粥样硬化



胰岛素抵抗



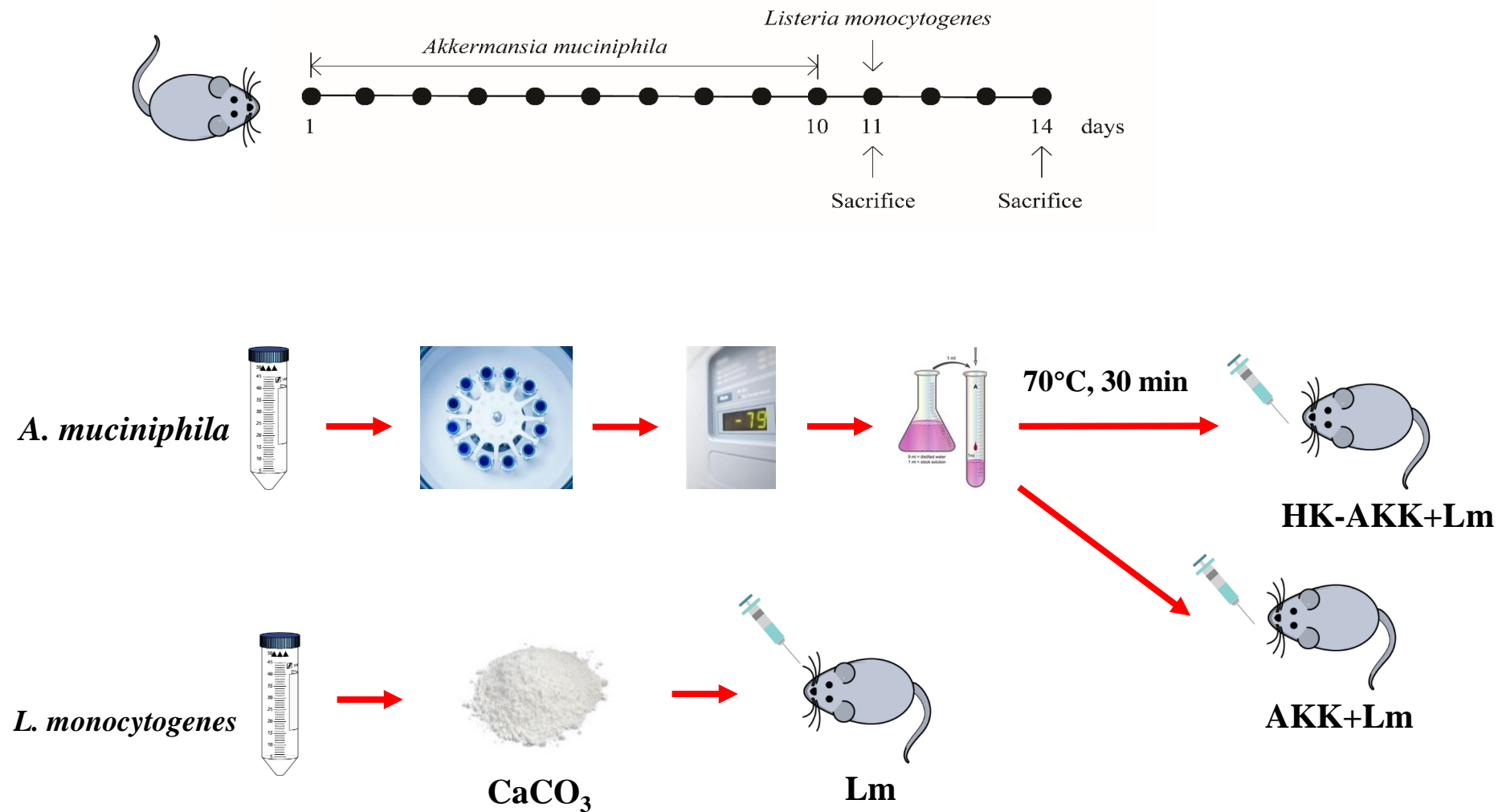
非酒精性脂肪肝



单增李斯特菌



试验方法



小鼠根据不同处理被分为以下各组:

(1) Control (PBS); (2) AKK; (3) HK-AKK; (4) Lm; (5) AKK+Lm; (6) HK-AKK+Lm



研究结果

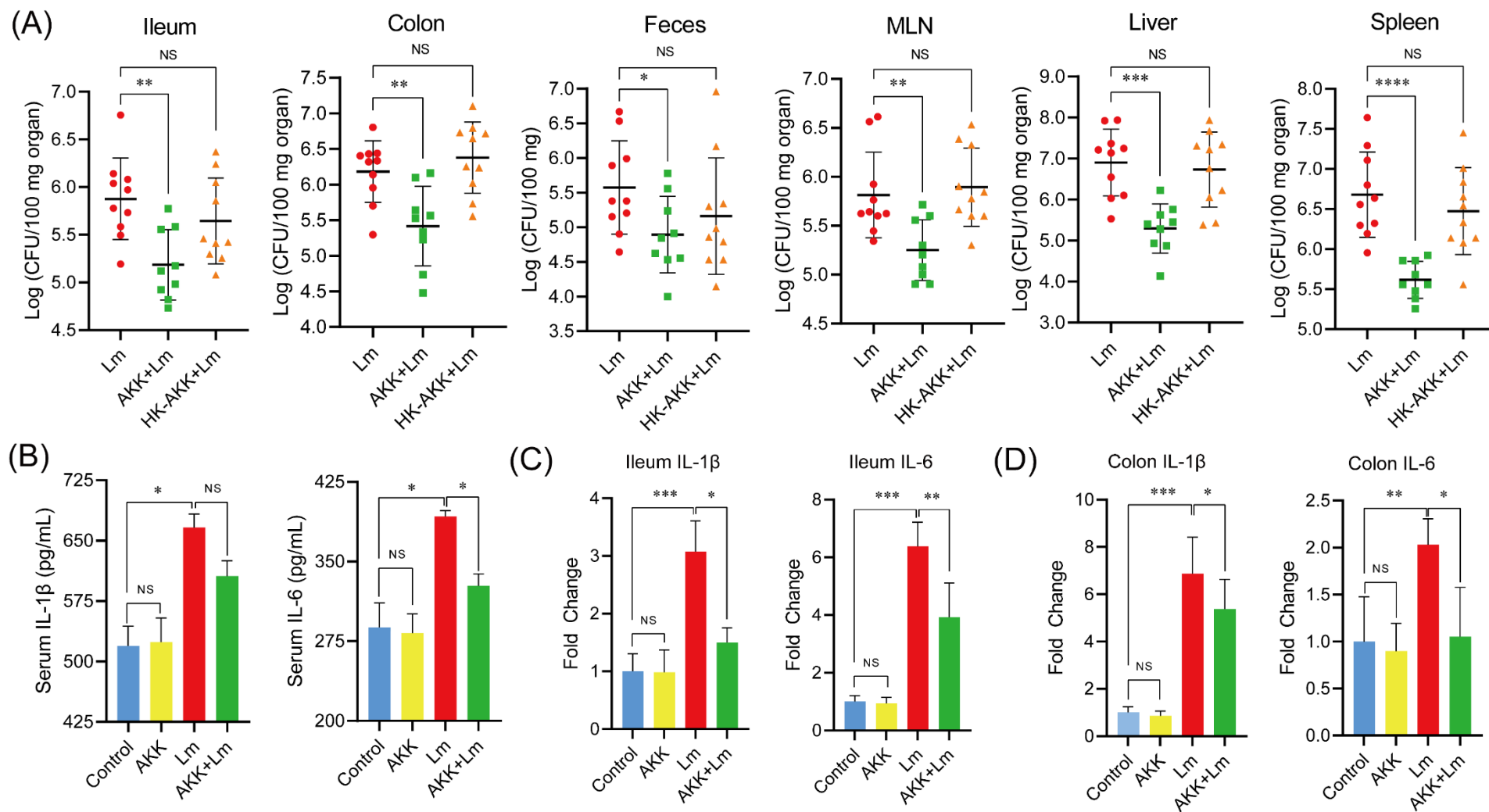


图 1 (A-D).活的嗜黏蛋白阿克曼菌减轻单增李斯特菌在小鼠器官的定植量及其诱导小鼠的炎症反应



研究结果

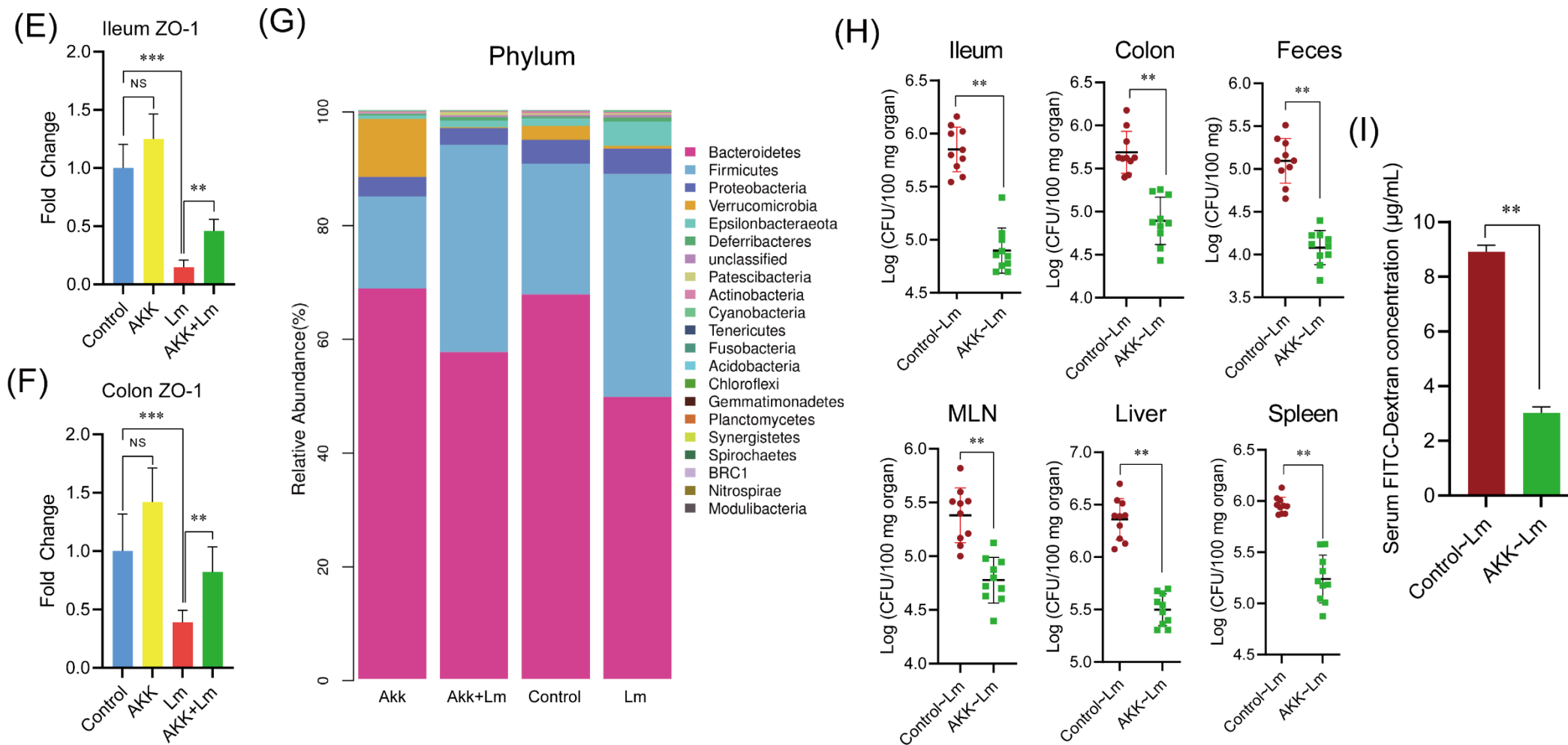
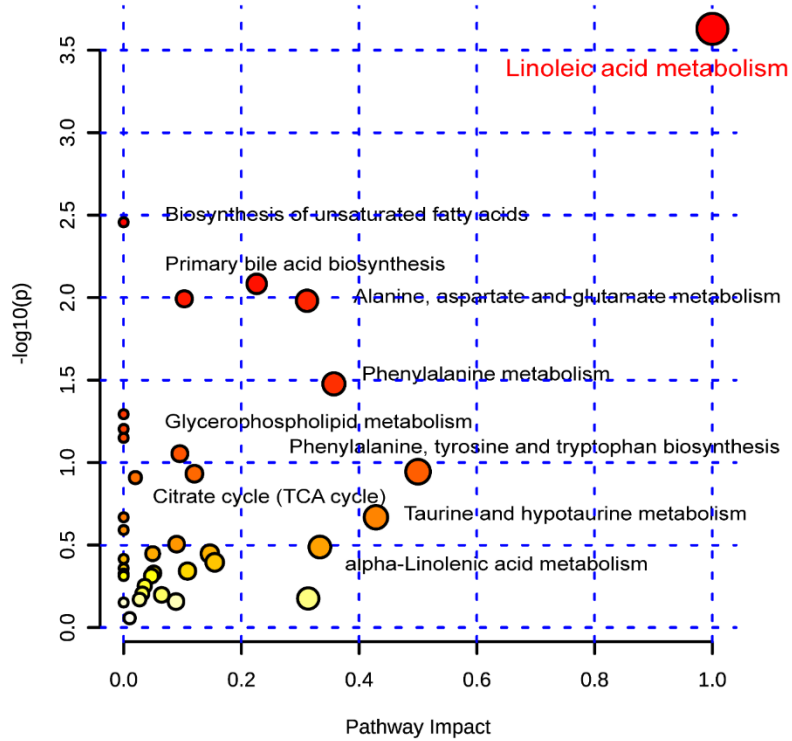


图 1 (E-I).嗜黏蛋白阿克曼菌通过调节肠道菌群减轻单增李斯特菌对小鼠感染。

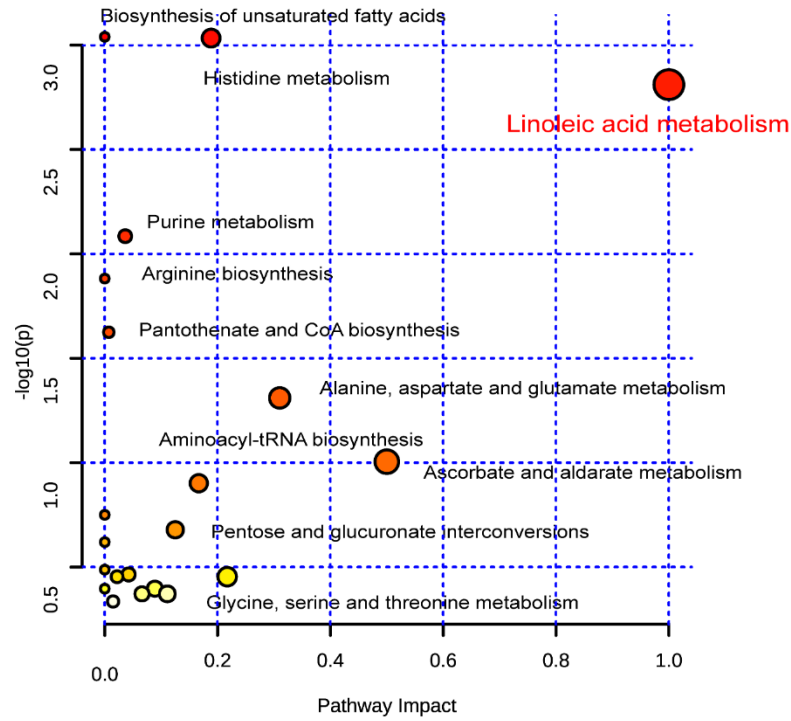


研究结果

(A) Control VS Lm



(B) Lm VS AKK+Lm



(C)

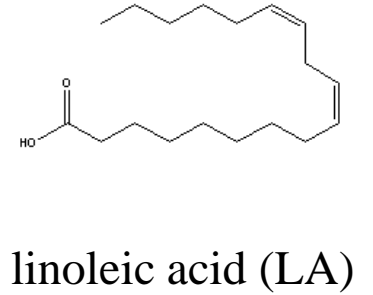
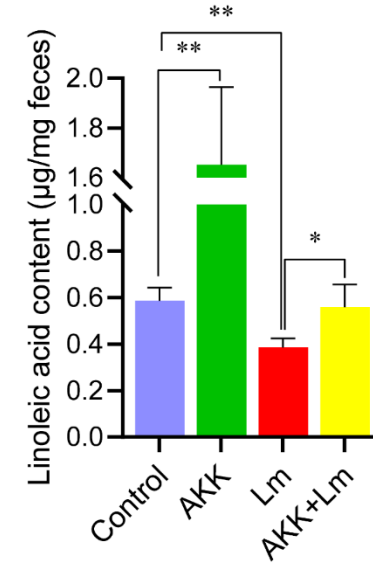


图 2 (A-C).嗜黏蛋白阿克曼菌干预增加小鼠肠道内的亚油酸水平



研究结果

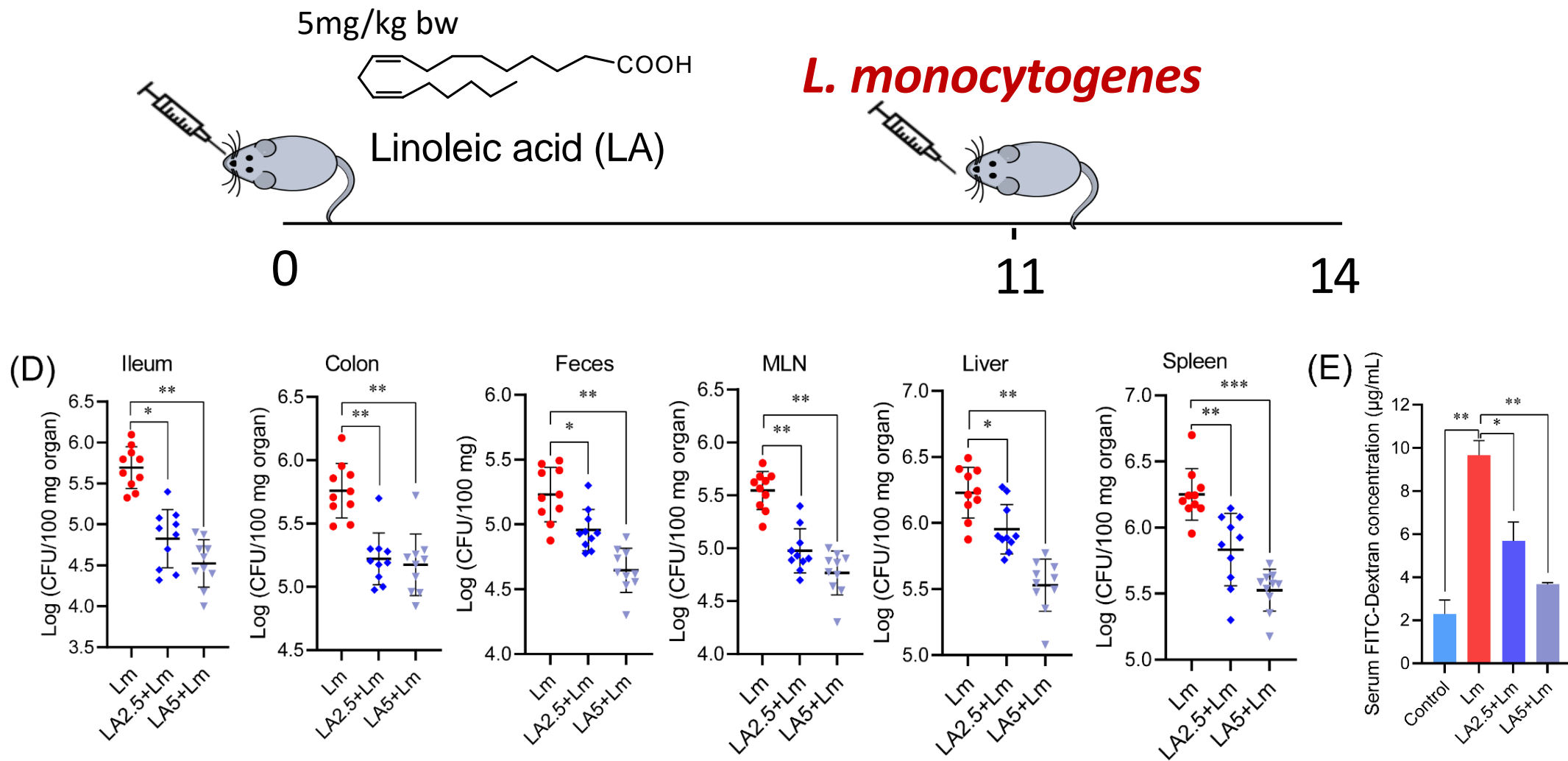


图 2 (D-E). 肠道代谢物亚油酸通过增强肠上皮屏障减轻单增李斯特菌对小鼠的感染



研究结果

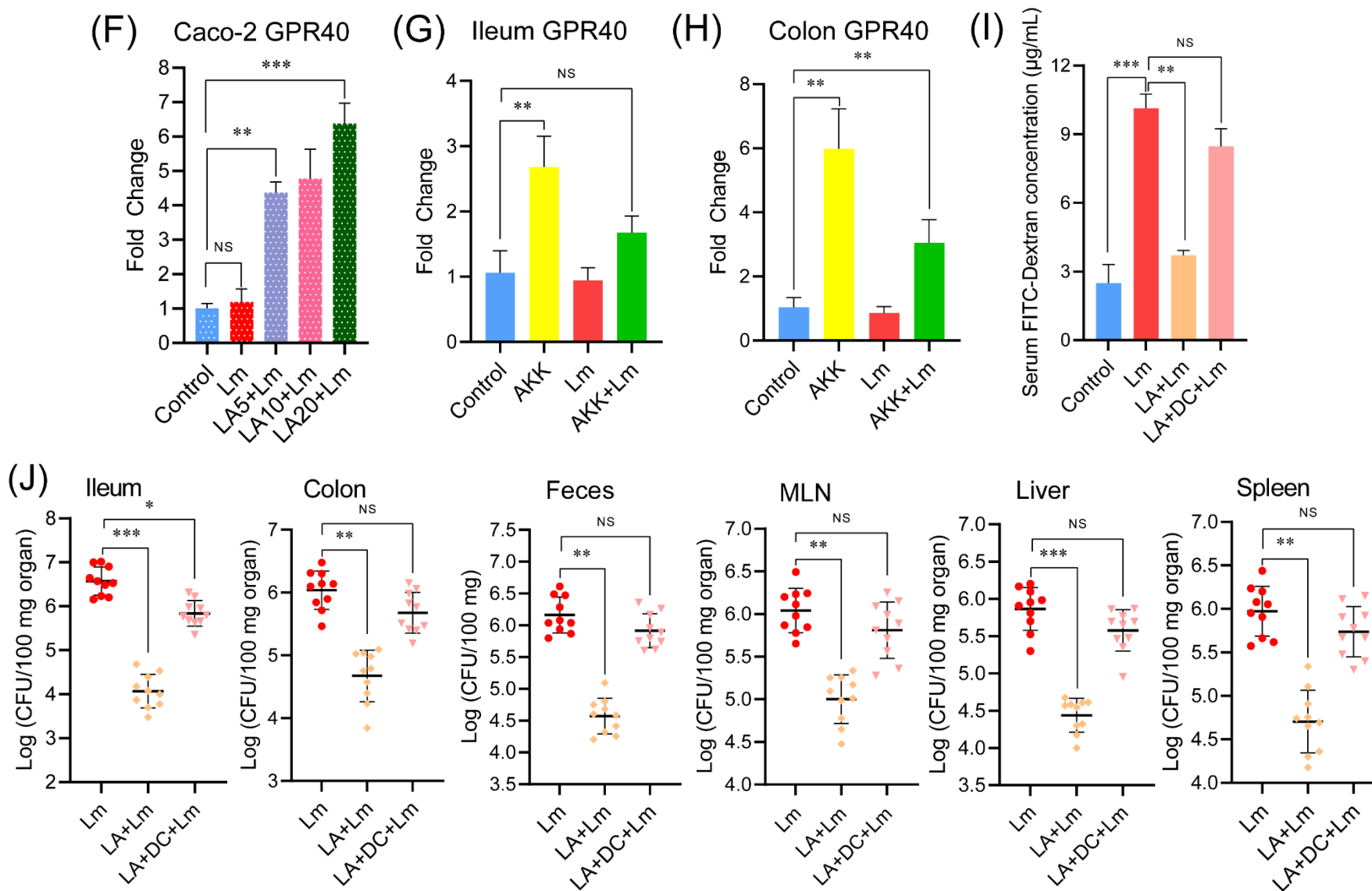


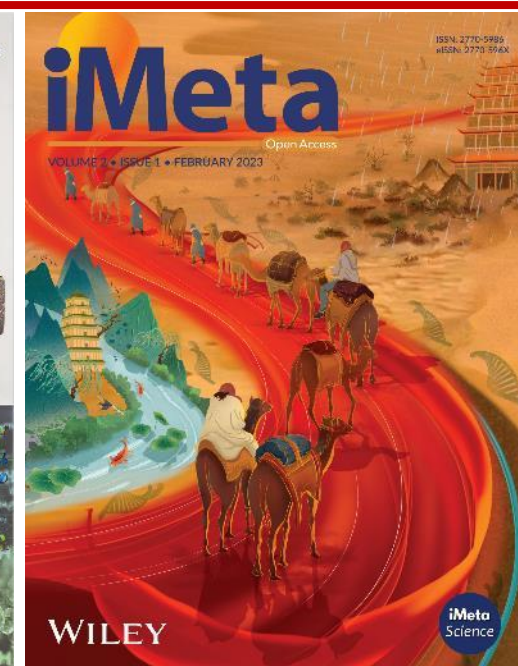
图 2 (F-J). 亚油酸通过激活宿主GPR40通路减轻单增李斯特菌对于小鼠的感染能力.



总结

- 活的嗜黏蛋白阿克曼菌可减轻单增李斯特菌对小鼠的感染能力
- 活的嗜黏蛋白阿克曼菌可调节小鼠的肠道菌群组成并增强小鼠的肠上皮屏障功能
- 嗜黏蛋白阿克曼菌干预可增加小鼠肠道内的亚油酸水平
- 亚油酸可通过激活肠道细胞GPR40通路增强肠上皮屏障从而减轻感染

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