

Additional files/ Supplementary Figures

Title: Short chain fatty acid acetate increases TNF α -induced MCP-1 production in monocytic cells via ACSL1/MAPK/NF-kB axis

Authors: Areej Al-Roub, Nadeem Akhter, Amnah Al-Sayyar, Ajit Wilson, Reeby Thomas, Shihab Kochumon, Fatema Al-Rashed, Fahd Al-Mulla, Sardar Sindhu, Rasheed Ahmad

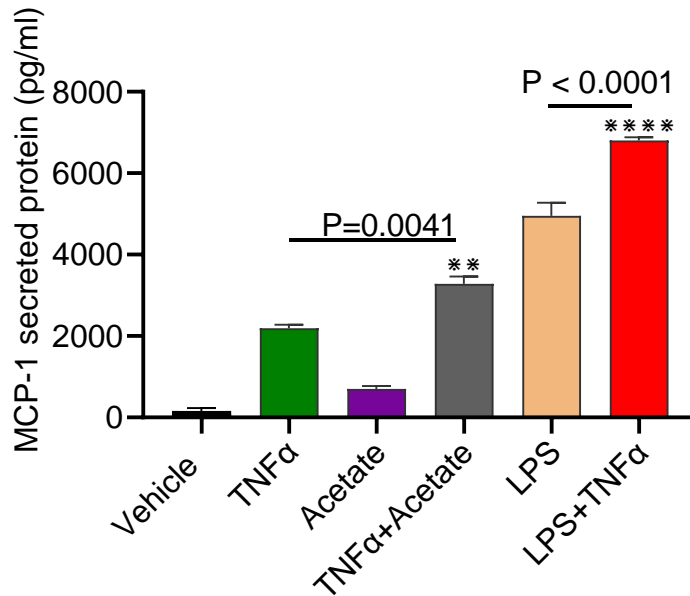


Figure S1. TNF α /LPS induces higher MCP-1 production compared to stimulation by TNF α /acetate. THP-1 monocytic cells were stimulated in triplicate wells with tumor necrosis factor (TNF)- α (10 ng/mL) with/without sodium acetate (100 mM) or TNF α (10 ng/mL) with/without lipopolysaccharide (LPS; 10 ng/mL) and cells were incubated at 37°C for 24h. Supernatants were harvested for determining MCP-1 levels by ELISA. The data obtained from 3 independent experiments with similar results show MCP-1 expression in response to co-stimulation by TNF α /acetate or by or TNF α /LPS. All data are expressed as mean \pm SEM (n = 3). **p < 0.01, ****p < 0.0001.

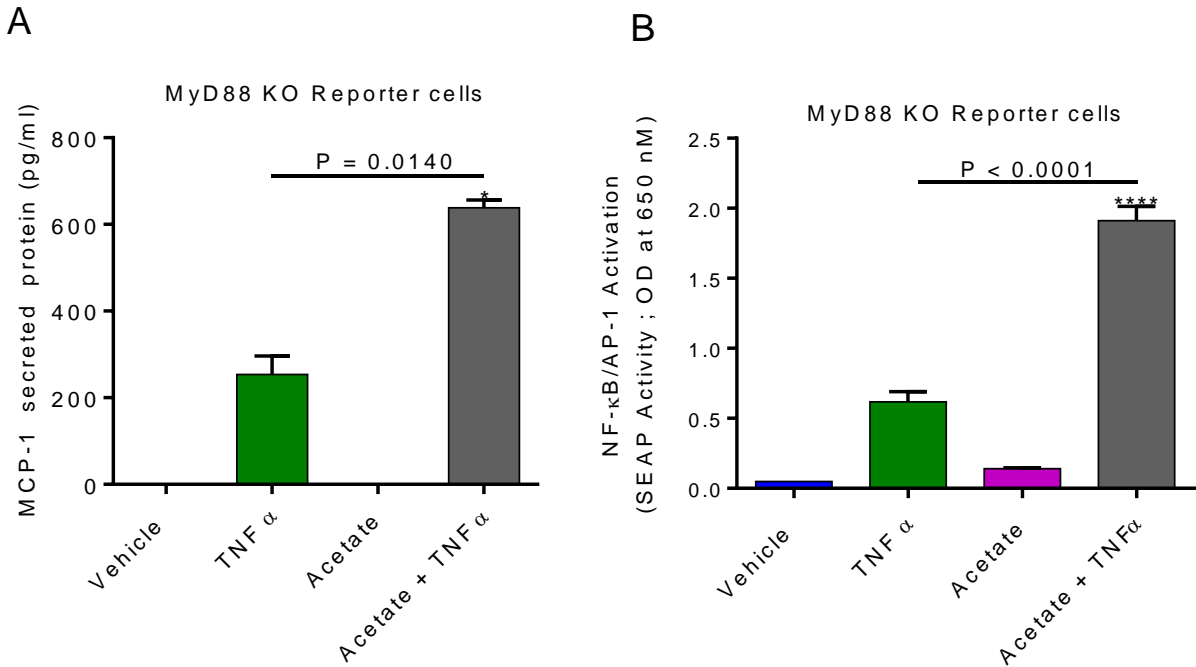


Figure S2. TNF α together with acetate increases MCP-1 and NF- κ B/AP-1 activity independent of MyD88. (A) MyD88 Knockout reporter cells were treated as described. Culture media were collected. **(A)** MCP-1 protein was determined in the supernatant. **(B)** Cell culture media were assayed for SEAP reporter activity (degree of NF- κ B/AP-1 activation). The results obtained from three independent experiments are shown. All data are expressed as mean \pm SEM ((n =3). *p < 0.05, ****p < 0.0001 versus TNF- α alone.