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Canagliflozin exerts anti-inflammatory effects by inhibiting intracellular glucose metabolism and promoting autophagy in immune cells

Chenke Xu ^{a, b, †}, Wei Wang ^{c, †}, Jin Zhong ^c, Fan Lei ^d, Naihan Xu ^{a, b, c}, Yaou Zhang ^{a, b, c},
Weidong Xie ^{a, b, c, * 1}

^a School of Life Sciences, Tsinghua University, Beijing 100084, China

^b Shenzhen Key Lab of Health Science and Technology, Division of Life Science & Health, Graduate School at Shenzhen, Tsinghua University, Shenzhen 518055, China

^c Open FIESTA Center, Tsinghua University, Shenzhen 518055, China

^d Laboratory of Pharmaceutical Science, School of Life Science, School of Medicine, Tsinghua University, Beijing 100084, China

Abbreviations

AMPK, AMP-activated protein kinase; pAMPK, phosphor-AMPK; CAN, canagliflozin; 2-DG, 2-Deoxy-D-glucose; ECAR, extracellular acidification rate; ELISA, enzyme linked immunosorbent assay; IL-1, interleukin-1; IL-6, interleukin-6; LC3, microtubule-associated protein 1A/1B-light chain 3; LPS, lipopolysaccharides; 3-MA, 3-methyladenine; MTT, (3-(4,5-dimethyl-2-thiazolyl)-2,5-diphenyl-2-H-tetrazolium bromide; NFκB, nuclear factor kappa B; NSAIDs, non-steroidal anti-inflammatory drugs; P62 (SQSTM1), sequestosome-1; PFK2, 6-phosphofructo-2-kinase; RT-PCR, reverse transcription and quantitative real-time polymerase chain reaction; ROS, reactive oxygen species; SGLT2, sodium-glucose cotransporter 2; TNF- α , tumor necrosis factor α .; TLR4, toll-like receptor 4.

¹ *Corresponding author: Dr. W. Xie, Shenzhen Key Lab of Health Science and Technology, Division of Life Science & Health, Graduate School at Shenzhen, Tsinghua University, Shenzhen 518055, China.

Email: xiewd@sz.tsinghua.edu.cn

[†] These authors contribute equally to this work

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