

Beta-caryophyllene protects against alcoholic steatohepatitis by attenuating inflammation and metabolic dysregulation

Running Title: Beta-caryophyllene is hepatoprotective

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Supplementary Table 1.

Primer sequences used in the present study

| Gene symbol | Accession number | Forward primer | Reverse primer |
|--------------------|-------------------------|------------------------------|---------------------------|
| Actb/B-actin | NM_007393.5 | CACCCGCGAGCACAGCTTCTT | TTTGACATGCCGGAGCCGTT |
| RPLP0 | NM_007475.5 | TCCAGGCTTTGGGCATCA | CTTTATCAGCTGCACATCACTCAGA |
| TNFA | NM_013693.3 | TCTCATTCCTGCTTGTGGCAG | TCCACTTGGTGGTTTGCTACG |
| II1B | NM_008361.4 | TGCCACCTTTTGACAGTGATGA | AGGTCCACGGGAAAGACACA |
| ICAM1/CD54 | NM_010493.2 | AACTTTTCAGCTCCGGTCCTG | TCAGTGTGAATTGGACCTGCG |
| F4/80/Adgre1 | NM_010130.4 | CTTTGGCTATGGGCTTCCAGTC | GCAAGGAGGACAGAGTTTATCGTG |
| CD68 | NM_001291058.1 | TGCGGCTCCCTGTGTGT | TCTTCCTCTGTTCCCTGGGCTAT |
| Iba-1/AIF1 | NM_019467.2 | CAGACTGCCAGCCTAAGACA | AGGAATTGCTTGTTGATCCC |
| CD11b/Itgam | NM_001082960.1 | GGATCCGGAAAGTAGTGAGAGAA C | CCGAATTTTTCTCCATCTGTGAT |
| Il6 | NM_001314054.1 | AACCACGGCCTTCCCTACTT | TGCCATTGCACAACCTCTTTTCTC |
| CCL2/MCP-1 | NM_011333.3 | GGCTCAGCCAGATGCAGTTA | TCCTTCTTGGGGTCAGCACA |
| CCL4/MIP-1b | NM_013652.2 | CTGTGCAAACCTAACCCCGA | ATACCACAGCTGGCTTGGAG |
| CXCL2/MIP-2 | NM_009140.2 | AGTGAACCTGCGCTGTCAATGC | AGGCAAACCTTTTGACCGCC |
| Arg1 | NM_007482.3 | TTTTAGGGTTACGGCCGGTG | CCTCGAGGCTGTCCTTTTGA |
| Mrc2 | NM_008626.3 | CAGACTGCCAGCCTAAGACA | AGGAATTGCTTGTTGATCCC |
| Mgl1/Clec10a | NM_001204252.1 | AAGAACAACGGCTCGGAAGTGG | GAGCTCCTAGCTCTCCTTGGC |

| | | | |
|----------------|----------------|-------------------------------|---------------------------------|
| CD163 | NM_001170395.1 | GCCTCTGCTGTCACCTAACGC | AGATCCATCTGAGCAGGTCCT |
| Clec7a | NM_001309637.1 | GGCGACACAATTCAGGGAGA | AGTTTGGGATGCCTTGGAGG |
| IL10 | NM_010548.2 | GGCGCTGTCATCGATTTCTC | GCCTTGTAGACACCTTGGTCTTG |
| Ly6G | NM_001310438.1 | TGCGTTGCTCTGGAGATAGA | CAGAGTAGTGGGGCAGATGG |
| SELE | NM_011345.2 | AGCAGAGTTTCACGTTGCAGG | TGGCGCAGATAAAGGCTTCA |
| SELP | NM_011347.2 | GCCAGTTCATGTGCGATGAA | GGCGAAGATTCCTGGACACTT |
| Ppara | NM_001113418.1 | TCGGCCTGGCCTTCTAAACATAG | TCTTGCAACAGTGGGTGCAGCG |
| Pparg | NM_001127330.2 | CTGTGGACCTCTCCGTGATG | GCCTGTTGTAGAGCTGGGTC |
| Ppard | NM_011145.3 | ATCGTCAACAAAGACGGGCT | GCTTCTACCTGGGGCACATT |
| Ppargc1a/PGC1a | NM_008904.2 | AGACAGGTGCCTTCAGTTCAC | AGCAGCACACTCTATGTCCT |
| Ppargc1b/PGC1b | NM_133249.2 | TGGAGACTGCTCTGGAAGGT | TGCTGCTGTCCTCAAATACG |
| G6PC | NM_008061.4 | AAAGTCAACCGCCATGCAAAGGA C | TAGCAAAGAAAGACAGGGCTACCAG |
| Pck1/PEPCK | NM_011044.2 | GGAAGGACAAAGATGGCAAGTTC | AGGCGTTTTCTTAGGGATGTAG |
| PFK | NM_001163487.1 | CTCCTCCCCGTGTTTCGCCAAG | TGCCACCCAGCTGAAGCATCATAG |
| HMGCS2 | NM_008256.4 | TGGTTCAAGACAGGGACACAGAA C | AGAGGAATACCAGGGCCCAACAAT |
| FGF21 | NM_020013.4 | CCAGATGTGGGCTCCT | AGAAACAGCCCTAGATTCAGGAAGA GT |
| SIRT1 | NM_019812.3 | TGTGAAGTTACTGCAGGAGTGTA AA | GCATAGATACCGTCTCTTGATCTGAA |

Legends for Supplementary figures

Supplementary Figure 1.

Supplementary Fig.1 shows colocalization of the two utilized macrophage marker, F4/80 and Iba-1. F4/80 stains the cell membrane of macrophages, while Iba-1 as an actin-binding protein gives a detailed picture of cytoskeletal organization and cell shape. The two markers are highly colocalized.

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