

**Supplementary Table S1.** The promoter region sequence of SREBP and FASN. Bases in different color, frame and background positions were possible methylation locations or transcription factor binding areas, which were used as reference sites for primer design of methylation sequencing

<p><b>SREBP1-s1(1748bp):</b></p> <p>CGAGGAAAGAGTTACTCTGGTAAGCCTGACTGTCTTGAAACTCGCGTATAGGACCATGCTGCCCTAAACTCAA  AAGTTCTGCCTTCTCTGCTCTGAGAAGTGCTGGATAAAGGGCGTGCGGCCACCCACACCAGCTTCACAA  AGAGAGCTTTTCTAGTTCTGGCTCCAGGGTTTTCTTTGGACTTTGCCTTCGGCTCTTCGGAAACCATGGCAC  CAAAATAAAGTGCATTTGTAAGAGCTAAGTAATAGTCTTTACTCAATTCCCAGAAATCAGGCGGATCTGTTGTGA  TGTGCCAAAACACCTCGCTCTGCAGAGACAGCCCTAGTAAGTTGACTTGGGAAAAAAAAATCAGTGATCCTGGGT  ACACTTGTGTAGGGGAGGTGCTAGGTCGCGGACCTCTGAAGACCCTCCCCCTTTGGCTGGGAAGGGCTGTTG  AGTTTGC CGCAAAATCATCAGCTTCTGGATGTCTTCTGATGGCGGATATGCGAGGGTGGCCCAAAGCAAGGG  CTCTCCATGTAGGGCGGAGAGGTGGTTTATAGGTCGCGCCACTTGTGTGCACTTTATTCTGTGCATTTTCTAGC  AGCCA CGCTGGGAGAGGAACAAAA CGAGTCCAGGTGGAGCCAGGCGCACACTCCCTCCTTGCTCGGACAA CGGA  TTCTGGTTGGGAGGTGAGGAAAGCCACCCAGCCTGCGGATCTGGAATCGAGCGAGGCAGCCTCCAGGTGGCGTG  GGCCCGGACCTTCTCGGAGGCTCCCTGGTTGACTCCTTGTAGATACTTGTGGGTCAGAATGCTTTATTTACGCCT  CCCCTGCTTTACCTGTTCTAAGTACAGGGCCAGGATTA CACTCGGTCAGGCTGCTAGCCTGGCCTGGCCCTGC  CCCAGGTCATGATTCAGGCAACCGGGCTCGGTCCTCTGGGCCACAGAACCCTGCTTGACCTTGGGATCCACACT  TTTTCTGAGTCTTCTGGAGAA CGGACTCTTTAGGAGTTGTA CGGGCA CGTAGCTTCTGATTCTCTGCCCC  AGTGGTGGGACTGACAGGATTAAGACAGGATCAGAAGTCCAGCCTCTTGCTCCTCCTGCAGTTTCTCTCCTCC  GGAGGCCCACTTCCAGGCTCCTAGGCTGAGAGGCTGGAGA CGGACCTCACAGGCCA CGTCTCAGCTGCACAGC  TTCCTAACCTCTCAGCCAGCCCGTAGACAGATCCTGGGCCCTTGCTACAGAGGAGGAAAAACAGGCACACAGTGG  TGAGGTACAC CGCAGGCTGTACAGCTGTAGTTGGACTAGGCTGTCTGTTCTAAAAGCAAAAGCGTAGGT  GGGTTTTCAATTTCTCGCTCCAACCCCACTCAGGCTCCTCCCTCTGGCCCTTCAGTCTAACCGCGTCTGAGCCA  GCTCTAATCTGTGGCTTCCCTTACAGCCCTTTGCTT CGTGCTGAGGAAGGTGGGGCCAGTGCCTGGGCAC CGG  TAGGAGGCGGCGGGAAACCAGGCCAGACAAGCGGTCTGAACC CGCTAGGCGAGCTGGTCTGGAGCGCTCCCGCT  CCGGGCGGGTGGGCGGGGTCTAGCAAGGAAACCCCGCCCCTCTGTC CGGGTGGCTCCGCCA CGGATTTACAGACTC  TGAGGAACTTTTCACTAACCGCGGCCCTCTCCAGAAGCCGGT CGGGCGCGCGCCATGGAAGAGCTGTCTTACG  CGAGACCGGCTCTGGAACAGGCGC</p>
<p><b>SREBP1-s2(1770bp):</b></p> <p>TCTTTTGTGTGTTATCATACATATTCTCCAGGGCATGGGATT CGTGTATATTCCCGGACATCTGGGCTCTGAC  TGATACTCATA CGGCTATCTACTCAGAGATTT CGTTCTTGGAGGTCAGCACAGTCCCGTGACAGTAGGGGGCGCCA  CCCCCACCAGCTTACAGGGAGCTTTTCTAGTCTGGCTCCAGGTTTTCTTTGACTTTGCCTTCGGCTATT  CGGGAACCATGCAGCAATATAAAGTGCATTTGTAGAGCTATGTATAGTCTTTACTCAGTTCAGAATCAGGCGGA  TCTGTTGTGATGT CGCAAACACCTCGCTCTGCAGAGACAGCCCTAGTAAGTTGACTTGGGAAAAAAAAATCAG  TGATCCTGGGTACACTTGTGTAGGGGAGGTGCTAGGTCGCGGACCTCTGAAGACCCTCCCCCTTTGGCTGGGA  AGGGCTGTTTGAAGTTTGC CGCAAAATCATCAGCTTCTGGATGTCTTCTGATGGCGGATATGCGAGGGTGGCCC  CAAAGCAAGGGCTCTCCATGTAGGGCGGAGAGGTGGTTTATAGGTCGCGCCACTTGTGTGCACTTTATTCTGTGT  CATTTTCTAGCAGCCA CGCTGGGAGAGGAACAAAA CGAGTCCAGGTGGAGCCAGGCGCACACTCCCTCCTTGCT  CGGACAA CGGATTCTGGTTGGGAGGTGAGGAAAGCCACCCAGCCTGCGGATCTGGAATCGAGCGAGGCAGCCTC  CAGGTGGCGTGGCCCGGACCTTCTCGGAGGCTCCCTGGTTGACTCCTTGTAGATACTTGTGGGTCAGAATGCTT  TATTTACAGCTCCCCTGCTTTACCTGTTCTAAGTACAGGGCCAGGATTA CACTCGGTCAGGCTGCTAGCCTGG  CCTGGCCCTGCCAGGTCATGATTCAGGCAACCGGGCTCGGTCCTCTGGGCCACAGAACCCTGCTTGACCTTG</p>

Supplementary Table SI. Cont.

<p>GGATCCACACTTTTTCTGAGTCTTCCTGGAGAA<b>CG</b>ACTCTTTAGGAGTTGTA<b>CGGGCA<b>CG</b></b>CTAGCTTCCTGATC                  CTCTCTGCCCCAGTGGTGGGACTGACAGGATTAAGACAGGATCAGAAGTTCCAGCCTCTTGCTCCTCCTGCAGGT                  TCTCCTCCT<b>CG</b>GAGGCCACTTCCAGGCTCTAGGCTGAGAGGCTGGAGA<b>CG</b>GACCTCACAGGCC<b>CG</b>CTCCTC                  AGCTGCACAGCTTACTAACCTCTCAGCCAGCC<b>CG</b>TAGACAGATCTGGGCCCTTGCTACAGAGGAGGAAAAACAG                  GCACACAGTGGTGAGGTACAC<b>CG</b>CAGGCTGTACAGGTGTAGTTGGACTAGGTCTGTCTGTTCTAAAGAGC                  AAAG<b>CG</b>TAGGTGGGTTTTCAATTTCT<b>CG</b>CTCCAACCCCACTCAGGTCTCCCCCTCTGGCCCTTCAGAAGGTCTA                  A<b>CGA<b>CG</b></b>TCTGAGCCAGCTTAATCCTGTGGCTTCCCTTCAGCCCTTTGCTT<b>CG</b>TGCTGAGGAAGGTGGGGCCA                  GTGCCTGGGCAC<b>CG</b>GTAGGAGG<b>CGGCG</b>GGAACCAGGCCAGACAAG<b>CG</b>GTCTGAACC<b>CG</b>CTAGG<b>CG</b>AGCTGGTC                  TGGAG<b>CG</b>CTCC<b>CG</b>CTCC<b>CGGGCG</b>GGTGGG<b>CGGGT</b>CTAGCTGGAACCC<b>CG</b>CCCCTCTGT<b>CG</b>GGTGGTCC<b>CG</b>CCC                  A<b>CG</b>GATTCAGACTCTGAGGAACTTTCACTAA<b>CGCG</b>GCCCTCTCCAGAAGC<b>CG</b>GT<b>CGGGCG<b>CGGCG</b></b>CCATGGA                  AGAGCTGTCTTCAG<b>CG</b>AGA<b>CG</b>GCTCTGGAACAGG<b>CG</b>CTGG<b>CGA</b></p>
<p>FASN-F6R1-s1 (896bp) :</p> <p>GCACTTCC<b>CG</b>ACATGC<b>CG</b>GCTATCACCACCTCCTCCATGGCTATTCTCTG<b>CG</b>GGGAAGGTGGCATGGAGGGCCAA                  CACAGTCAGTCCCAGTACCAGCCACAGC<b>CG</b>CCAGAATCCACAGGTAGTTCC<b>CG</b>CCCTGACTTTCTGAGAGCAAGG                  ACTCAGAAAGGCCCCAGTGGAACTATC<b>CGGAT<b>CG</b></b>GCTGTAACACTGGATGAG<b>CG</b>AGTGT<b>CG</b>GGTCTCTCTGC                  AGTGATAGCTATTTCTGAGGTTT<b>CG</b>ATGCCTTG<b>CG</b>TTCAGACATT<b>CG</b>ACC<b>CG</b>GCCTGACCCTCCTCCCATGC                  CTTGCCAGAGCCACCTGGGACAGTGATCTGCCTAGTGTG<b>CG</b>CTCCATCCCAAGCTGGCTAAACCAGGAACTTGCA                  AAGAGGTGGGGCTTCAAGAAGCAGGGTAGGGGACCCTCACCTCAAGCCA<b>CG</b>GGGAAGCCAGTGCTTCCCTTT<b>CA</b>  <b>CGACTGGGGTGGAGAT<b>CG</b></b>GGCTGCTGTTCAGGGCCAGCCAAGA<b>CG</b>CCAGGCTTGTAAGGACCCAAGGGGACAG                  CCC<b>CG</b>GCTACTATTATTGAGCCAGGCCTGGTGGGGCCAAAGGGCCCTCCAGCAAGATC<b>CG</b>CTAGGTG<b>CG</b>GAGC                  AGGCAGAG<b>CG</b>GAAGCCTCTGGCCACTTGGC<b>CG</b>AACACCTTGTAGCCTGGC<b>CG</b>AGGCAACAGAAGGATCTGCTAGA                  TCCT<b>CG</b>GGTTCCTAAGGCACCTGCCAGGGCAGTGCAGGCCTTG<b>CGGC<b>CGCG</b></b>TAGTCC<b>CGACG</b>TAGAGGCTTCC  <b>CG</b>CCACCTAGC<b>CG</b>GTGAGGCTGGATGCT<b>CG</b>GATGACTTCC<b>CG</b>CTGAGGCCCC<b>CGGGCCT<b>CG</b>TG<b>CG</b></b>CACCC<b>AGA</b>                  CCAGCATCTGGCCTCTC<b>CG</b>GGCTGG<b>CGCG</b>GAGGACCAC<b>CGCG</b>GCCTCCTG<b>CG</b>CCTGCCAAAGCCTCCAG</p>
<p>FASN-F6R1-s2 (920bp) :</p> <p>TAGTATTTAGC<b>CG</b>GAATATAATT<b>CGAC<b>CG</b></b>TGC<b>CG</b>GCTATCACCACCTCCTCCATGGCTATTCTCTG<b>CG</b>GGGAAGGTGGCA                  TGGAGGGCCAACACAGTCAGTCCCAGTACCAGCCACAGC<b>CG</b>CCAGAATCCACAGGTAGTTCC<b>CG</b>CCCTGACTTTCTGAG                  AGCAAGGACTCAGAAAGGCCCCAGTGGAACTATC<b>CGGAT<b>CG</b></b>GCTGTAACACTGGATGAGC<b>CG</b>AGTGT<b>CG</b>GGTCTCTC                  TGCAGTGATAGCTATTTCTGAGGTTT<b>CG</b>ATGCCTTG<b>CG</b>TTCAGACATT<b>CG</b>ACC<b>CG</b>GCCTGACCCTCCTCCCATGCC                  TTGCCAGAGCCACCTGGGACAGTGATCTGCCTAGTGTG<b>CG</b>CTCCATCCCAAGCTGGCTAAACCAGGAACTTGCAAAGAG                  GTGGGCTTCAAGAAGCAGGGTAGGGGACCCTCACCTCAAGCCA<b>CG</b>GGGAAGCCAGTGCTTCCCTTT<b>CA<b>CG</b></b>ACTGGGG                  TGGAGAT<b>CG</b>GCTGCTGTTCAGGGCCAGCCAAGA<b>CG</b>CCAGGCTTGTAAGGACCCAAGGGGACAGCCC<b>CG</b>GCTACTATTA                  TTGAGCCCAGGCCTGGTGGGGCCAAAGGGCCCTCCAGCAAGATC<b>CG</b>CTAGGTG<b>CG</b>GAGCAGGGCAGAG<b>CG</b>GAAGCCTCT                  GGCCACTTGGC<b>CG</b>AACACCTTGTAGCCTGGC<b>CG</b>AGGCAACAGAAGGATCTGCTAGATCCT<b>CG</b>GGTTCCTAAGGCACCTG                  CCCAGGGCAGTGCAGGCCTTG<b>CGGC<b>CGCG</b></b>TAGTCC<b>CGACG</b>TAGAGGCTTCC<b>CGCG</b>CCACCTAGC<b>CG</b>GTGAGGCTGGA                  TGCT<b>CG</b>GATGACTTCC<b>CG</b>CTGAGGCCCC<b>CGGGCCT<b>CG</b>TG<b>CG</b></b>CACCCAGACCAGCATCTGGCCTCTC<b>CG</b>GGCTGG<b>CGCC</b>  <b>GGAGGACCAC<b>CGCG</b></b>GCCTCCTG<b>CG</b>CCTGCCAAAGCCTCCAGC<b>CGGGAGCCCG</b></p>