

## Supplementary Information

YKL-40\_Fw: GGCTTCTTCTGAGACTGGTGTTG  
YKL-40\_Rv: GAACCGGCCTGGAATTCC

**Figure S1.** The nucleotide sequences of the real-time PCR primers.

### Mw 976864.4

CATGGAATTCTGGTCTGGGCCATTGATCTGGATGACTTCACTGGCACTTTCTGCAACCA  
GGGCAAGTTTTCCCTAATCTCCACCCTGAAGAAAGGCCCTCGGCCTGCAGAGTGC**AAGTT**  
**GCACGGCTCCAGCT**CAGCCCATTGAGCCAATAACTGCTGCTCCCAGTGGCAGCGGGAAC  
GGGAGCGGGAGTAGCAGCTCTGGAGGCAGCTCGGGAGGCAGTGGATTCTGTGCTGGCAG  
AGCCAAAGGCCCTTACCCCGTGGCAAATAACAGAAATGC**AGATCT**GCAGGCCACAGGGG  
CCCAGGAGGATGAGTATGGACAGTTTCTCGTGAAGTGTAAACAGCATTCAGAATCTGCC  
AGCTTGACCTTCATCATCAATGGTGTGGAG**TTCCCTCTGCCACCTTCCT**CCTATATCCT  
CAGTAACAACGGCT**TACTGCACCGTGGGAGTCG**AGCCCACCTACCTGTCTCCAGAACG  
GCCAGCCCCTGTGGATCCTCGGGGATGTCTTCTCAGGTCTACTATTCCTGTACGAC  
TTGGG**GTTCGACT**CTCTACCAGGAGTTCAATGGCCTGAAGAAGATGAATCCCAAGCTGAA  
GACCCTGTTAGCCATCGGAGGCTGGAATTT**CAGCACTCAGAAGTTCACAGATATGGTAG**  
CCACGGCCAACAACCGTCAGACCTTT**GTCAACTCGGCCATCAGGTT**TCTGCGCAAATAC  
AGCT**TTTGACGGCCTTGACCTTG**ACTGGGAGTACCCAGGAAGCCAGGGGAGCCCTGCCGT  
AGACAAGGAGCGCTTACAACCCTGGTACAGGACTTGGCCAATGCCTTCCAGCAG**CTCG**  
**AG**GCCATCAATGACCCCTTCATTGACCTCAACTACATGGTTTACATGTTCCAATATGAT  
TCCACCCATGGCAAATTCATGGCACCGTCAAGGCTGAGAACGGGAAGCTTGTCA**CA**  
**TGGAAATCCCATCACCATCTT**CCAGGAGCGAGATCCCT**CCAAAATCAAGTGGGGCGATG**  
CTGGCGCTGAGTACGTGAGTCCACTGGCGTCTTACCACCATGGAGAAGGCTGGG  
GCTCATTTGCAGGGGGGAGCCAAAAGGGTCAATCATCTCTGCCCCCTCTGCTGATGCCCC  
**CA****GCGGCCGC****ATGCAGAAGGAGATCACTGCCCTGGCACCCAGCACAAATGAAGATCAAGA**  
**TCATTGCTCCTCCTGAGCGCAAGTACTCGGTGTGGATCGGCGGCTCCATCCTGGCCTCG**  
**CTGTCCACCTTCCAGCAGATG****TGGATCAGCAAGCAGGAGTATG**ACGAGTCCGGCCCTC  
**CATCGTCCACCGCAAATGC**TTCTAGGCGGACTATGACTTAGTTGCGTTACACCCTTTCT  
TGACAAAACCTAACTTGCAGCAAAAACAAGATGAGATTG**CTGCAGTACATGTTGAGGCT**  
GGGGCTCCTGCCAGTAAGCTGGTGTGGGCATCCCCACCTTCGGGAGGAGCTTCACTC  
**TGGCTTCTTCTGAGACTGGTGTG**GAGCCCCAATCTCAGGACCG**GGAATTCAGGCCGG**  
**TTC**ACCAAGGAGGCAGGGACCCTTGCCTACTATGAGAGAATTCCATG

**Figure S2.** Nucleotide sequence of the human Refs/YKL-40 standard DNA. The human Refs/YKL-40 standard DNA (1581 nucleotides long) contained six cDNA fragments (shown in different colors) that covered the PCR target regions (shown in bold and underlined) and 44–143 nucleotides of the flanking regions and contained the Bg1II, Sall, XhoI, NotI and PstI restriction sites (shown in bold and italics).

**MW 926,190.6**

GTTTTCCCAGTCACGACGTTGTAAAAACGACGGCCAGTGAATTGTAATACGACTCACTAT  
 AGGGCGAATTGGGCCCCGACGTGCGATGCTCCCGGCCGCCATGGCGGCCGCGGAATTCCG  
 ATTCATGGGATCCCCTGTCTAGGTAGCTGGCACCAGGAGCCGTGGGCAAGGGAAGAGGC  
 CACACCCTGCCCTGCTCTGCTGCAGCCAG**ATG**GGTGTGAAGGCGTCTCAAACAGGCTTT  
GTGGTCCTGGTGCTGCTCCAGTGCTGCTCTGCATACAACTGGTCTGCTACTACACCAG  
CTGGTCCCAGTACCGGGAAGGCGATGGGAGCTGCTTCCCAGATGCCCTTGACCGCTTCC  
TCTGTACCCACATCATCTACAGCTTTGCCAATATAAGCAACGATCACATCGACACCTGG  
GAGTGGAAATGATGTGACGCTCTACGGCATGCTCAACACACTCAAGAACAGGAACCCCAA  
CCTGAAGACTCTCTTGTCTGTGCGGAGGATGGAACTTTGGGTCTCAAAGATTTTCCAAGA  
TAGCCTCCAACACCCAGAGTCGCCGACTTTCATCAAGTCAGTACCGCCATTTCTGCGC  
ACCCATGGCTTTGATGGGCTGGACCTTGCTGGCTCTACCCTGGACGGAGAGACAAACA  
GCATTTTACCACCCTAATCAAGGAAATGAAGGCCGAATTTATAAAGGAAGCCCAGCCAG  
GGAAAAAGCAGCTCCTGCTCAGCGCAGCACTGTCTGCGGGGAAGGTCACCATTGACAGC  
AGCTATGACATTGCCAAGATATCCCAACACCTGGATTTCAATTAGCATCATGACCTACGA  
TTTTTCATGGAGCCTGGCGTGGGACCACAGGCCATCACAGTCCCCTGTTCCGAGGTGAGG  
AGGATGCAAGTCTGACAGATTGACGCAACACTGACTATGCTGTGGGGTACATGTTGAGG  
CTGGGGGCTCCTGCCAGTAAGCTGGTGATGGGCATCCCCACCTTCGGGAGGAGCTTCAC  
TCTGGCTTCTTCTGAGACTGGTGTGGAGCCCCAATCTCAGGACCGGGAATTCAGGCC  
GGTTCACCAAGGAGGCAGGGACCTTGCCCTACTATGAGATCTGTGACTTCCCTCCGCGGA  
GCCACAGTCCATAGAATCCTCGGCCAGCAGGTCCCCTATGCCACCAAGGGCAACCAGTG  
GGTAGGATACGACGACCAGGAAAGCGTCAAAAGCAAGGTGCAGTACCTGAAGGACAGGC  
AGCTGGCGGGCGCCATGGTATGGGCCCTGGACCTGGATGACTTCCAGGGCTCCTTCTGC  
GGCCAGGATCTGCGCTTCCCTCTACCAATGCCATCAAGGATGCACTCGCTGCAACGGC  
TGCAGGTCAAATCACTAGTGAATTCGCGGCCGCTGCAGGTGACCATATGGGAGAGCT  
CCCAACGCGTTGGATGCATAGCTTGAGTATTCTATAGTGTACCTAAATAGCTTGGCGT  
AATCATGGTCATAGCTGTTTTCTG

**Figure S3.** Nucleotide sequence and calculated molecular weight of YKL-40 open reading frame. ATG start codon is highlighted in bold. Open reading frame of YKL-40 is shown underlined.

PstI\_YKL-40\_Fw: **TGACCTGCAGT**TACATGTTGAGGCTGGGGGCTCCTG  
 Quant\_YKL-40\_Rv: CATGGAATTCTCTCATAGTAGGCAAGGGTCCCTGC  
 Quant\_Human\_AMCase\_Fw: CATGGAATTCTGGTCTGGGCCATTGATCTGGATGA  
 PstI\_Human\_actin\_Rv: **TGACCTGCAGCAAT**CTCATCTTGTTTTTCTGCGCAA

**Figure S4.** Forward and reverse primers used to construct the standard template DNA. The primers contains the PstI recognition sequence (underlined) and the 4 bases-long extra nucleotides (boldfaced) to efficiently cleave close to the end of the amplified cDNAs by PstI.

Entire YKL-40\_Fw: CATGGGATCCCCTGTCTAGGTAGCTGGCACCAGGA  
 Entire YKL-40\_Rv: TGACCTCGAGCCGTTGCAGCGAGTGCATCCTTGAT  
 M13\_Fw: GTTTTCCCAGTCACGAC  
 M13\_Rv: CAGGAAACAGCTATGAC

**Figure S5.** Primers for amplifying entire coding cDNAs by PCR.