

Supplementary Figure legends

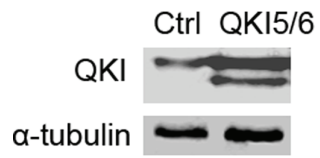


Fig S1

Fig S1 QKI5 is the main isoform expressed in HL-60 cells.

HEK293 cells that were co-transfected with both QKI5 and QKI6 expression vectors were harvested for Western blot analysis. The band of endogenous QKI in HL-60 cells was exactly the same size as the exogenous QKI5.

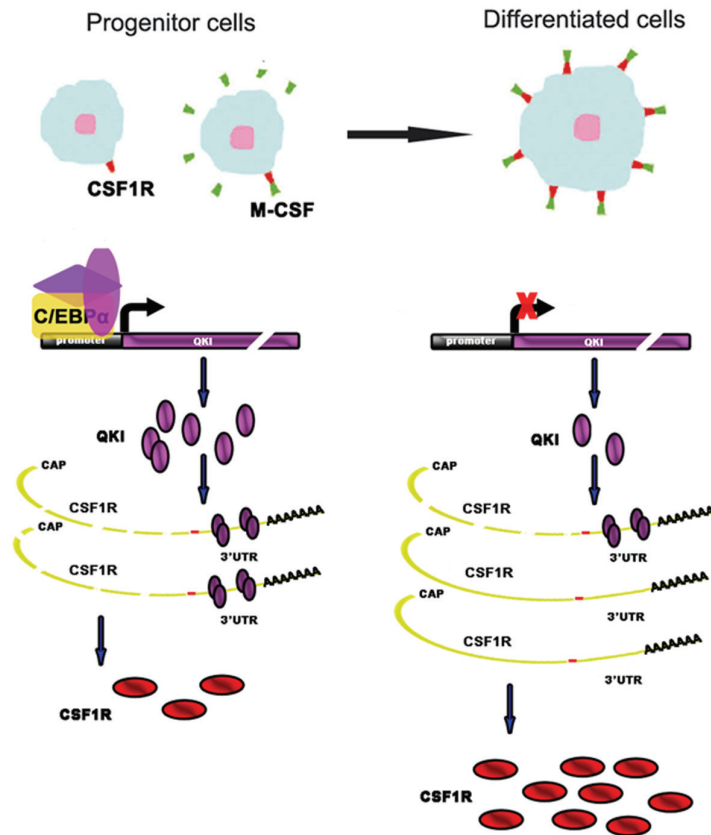


Fig S2

Fig S2 A schematic illustration of the role of QKI in monocytic-macrophage differentiation.

In undifferentiated cells or cells at an earlier differentiation stage (left), an abundant expression of QKI was activated by C/EBP α , which leads to a decreased stability of the simultaneously transcribed CSF1R mRNA at this stage, delaying the differentiation process. Upon terminal differentiation, QKI expression levels drop and release the repression of CSF1R (right), resulting in the facilitated expression of CSF1R and subsequent macrophage differentiation.

Table 1. Primers and Sequences Used in the experiment

Gene/Primer name	Sequence
Semi-RT-PCR QKI5	
Forward	AGAGCAGTTGAAGTGAAG
Reverse	GAAGGTCATAGGTTAGTTGCC
qPCR QKI5	
Forward	ATCCTATTGAACCTAGTGGTGTA
Reverse	GGTCAGAAGGTCATAGGTTAGTT
qPCR QKI6	
Forward	ATCCTATTGAACCTAGTGGTGTA
Reverse	AGGGTTCAGTTAAGACCGTTCT
qPCR QKI7	
Forward	ATCCTATTGAACCTAGTGGTGTA
Reverse	AACAGCTGCTGTATTCTAGTCCT
p27	
Forward	GGGACTTGGAGAAGCACTGC
Reverse	TTCTTGGGCGTCTGCTCCAC
β -actin	
Forward	GAAAATCTGGCACCACACCT
Reverse	GGCCGGACTCGTCATACTC
qPCR GAPDH	
Forward	GACCTGACCTGCCGTCTA
Reverse	AGGAGTGGGTGTCGCTGT
qPCR CSF1R	
Forward	CGGTGACCTTGCGATGTG
Reverse	CGTTGTTGGTGCTGAGGAT
CSF1R mRNA 3'UTR	
Forward	GGGAATTCACA ACTATCAGTTCTGCTGAGGAG
Reverse	GGCTGCAGGCATTAATGCTGTTAGTTTAATGTGG
CSF1RmRNA Δ 3'UTR1	
Forward	GGGAATTCACA ACTATCAGTTCTGCTGAGGAG
Reverse	GTCTGCAGAATGTGGACAGAGACATCCCAC
CSF1RmRNA Δ 3'UTR2	

Forward	GGGAATTCACA <u>ACTATCAGTTCTGCTGAGGAG</u>
Reverse	CTCTGCAGAGTTTGTGCTTCCTGCTTGG
CSF1RmRNA 3'UTRm	
Forward	GGGAATTCACA <u>ACTATCAGTTCTGCTGAGGAG</u>
Reverse	GGCTGCAGGCC <i>CAGT</i> ATGCTG <i>AGGAG</i> TTAATG
Luciferase gene	
Forward	TCGTTGACCGCCTGAAGT
Reverse	CATCGTCGGGAAGACCTG
QPm1	
Forward	GATCTCCGACTTCTATAGATCAAGGACTTCATTG GTGCAGCTGAGGAAATT <i>AGAGTACATA</i> AGTCTAA ATGTTGGAAATCCACCAA <u>ACTGCA</u>
Reverse	GTTTGGTGGATTTC AACATTTAGACTT <i>ATG</i> ACT <i>CTA</i> ATTTCCCTCAGCTGCACCAATGAAGTCCTTGA TCTATAGAAGTCGGA
QPm2	CCTCACGGAACACTGA <i>ATGTCGATATCA</i> AGCATT CGAGCACG
QKI siRNA	
Sense	GGCACCUCACAGAGAUGCCAACAUA
Antisense	UAAUGUUGGCAUCUCUGUAGGUGCC
NC siRNA	
Sense	UUCUCCGAACGUGUCACGUTT
Antisense	ACGUGACACGUUCGGAGAATT

NOTE. Primers and sequences used in the experiment. The restricted endonuclease sites are underlined. NC, negative control. Mutated sites, indicated in italic fold in grey background.