

Supplementary Table S1 The sequences of qPCR primers used in this study

Genes	Forward primer Sequence(5'-3')	Reverse primer sequence(5'-3')
SLU7	AGTTAATGCTGCACCCCTATCG	GCCCAATTTTCGCTGTTCTTCTA
GAPDH	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGTCATACTTCTCATGG
MAP3K3#1	GGCGAATTATAGCGTTCAGCC	GGGACAACAGCAATATCCTAAGG
MAP3K3#2	CAGGTGCGGATCAAGGCTT	CCGCTCAGGAACATAGCCAG
CWC22#1	ATGGAGTCACGAAACAGGGAC	GATTTCCGAGACCTTTTCCGAT
CWC22#2	GGAAAAGGTCTCGGAAATCCC	CCACCAGTGCGAGTAAGAAGA
PRPF8#1	ATGGCCGGAGTGTTTCCTTAT	TGGTCTCGAATGATCTTCCTGAC
PRPF8#2	TGACAAAAGGGTTTACTTGGGTG	CTCATTGACGAAGGAAATGGCT
NAA10#1	CCCTGCACCTCTATTCCAACA	GCTCCACTTCACTGATCTGAAA
NAA10#2	ATGAAGCGGGACCTCACTCA	GCTCTCCACCTTGTTCTCGATG
NAA11#1	CCAGCCTTGACCTTTATTCT	CCCGCTTCATAGCATAAGCAT
NAA11#2	CTTATGCTATGAAGCGGGATCTC	TAGCCGGGTCTTTTGCTGAC
NAA20#1	GACGACCTGTTCCGCTTCAA	GGGCGAGGTATTGTAGGTAGAA
NAA20#2	TTGCCCCAGAATTTGACG	CCGTTGCTGGCCGAATAGT
NAA30#1	CCGAGCTACAAATGCCCCGATA	CACCTACACACTCCTCCCCTA
NAA30#2	GCTCAACGGATTGATTAGCCC	CACCTCTGCTACGCTCAGG
NAA40#1	TTTCTCACTTCCGGTTTGACG	CCTTGCTTTCCAAGTGCCTT
NAA40#2	ATGTAAGCGAGTGTCTGGACT	TGGTTTGATATTCGTTTTGGTC
NAA50#1	TGGCACCTTACCGAAGGCTA	TTGCCGACTCATTGCTGATCT
NAA50#2	TCCAGTCAGCTACAATGACAAGT	CCTTCGGTAAGGTGCCAGAC
NAA60#1	CCAACCTCTCTGTTGACACACA	AGTAAGAGGGAACCTATGCCG
NAA60#2	ATCGAGTACCCAGACTCATGG	TGTGTCAACAGAGAAGTTGGATG
NAA80#1	GTGCTGGGAGGCCTTAGAAC	ACAGTGGCTCTCCTCATGT
NAA80#2	GAGGCCAGCATCAACATGAGG	CTGCTGCTAGGTTGCAGGT

Supplementary Table S2 The targeted sequences of plasmids used in this study

Plasmid Names	The Sequences
shSLU7#2	CACAGGAGATACCATTTC AAT
shSLU7#4	CAGAAGTTGATGAAGAAGGAA
shMAP3K3#2	GACCAAGTTGTTGCTTAATTT
shMAP3K3#5	TGATTGTT CACCGGACATTA
shPRPF8#1	CCCAACTTGTACCGCTACATA
shPRPF8#2	CGCCTCATGAAACATGATGTT
shCWC22 #4	GAAGCATACACACCGAATTAA
shCWC22#5	CAAATTGGAGAGATCCTATAA
siNAA10#1	GCCATGATAGAGAACTTCAAT
siNAA10#2	CCCGAGAACTACCAGATGAAA
siNAA10#3	CCATGGACATATCACCTCATT
siNAA11#1	TAGTGAGGTGGAACCTAAATA
siNAA11#2	TCTCACTCTTA ACTCTATAAA
siNAA11#3	AGATGAGCTGAGACGACAAAT
siNAA20#1	CCAGGGATACTGAGAAGAAAT
siNAA20#2	GTGGAGAATTAATGGGTTATA
siNAA20#3	GTTCCGCTTCAACAACATTAA
siNAA30#1	ACCAGTAAGTGGAACATAATT
siNAA30#2	GATGTTCCGCAGAGGTTATAT
siNAA30#3	GCCAGTTGATAGCCAAGATTT
siNAA40#1	CGCAGTTGGAATTGCTGT TAA
siNAA40#2	GAAGCGTTGCAATTTGAAATT
siNAA40#3	CCGAGAGAAACGGGAGGAAAT
siNAA50#1	ATGTGACACCACACAATATTA
siNAA50#2	GCACTTGCTTGTCGCCAAATA
siNAA50#3	GAATCAGAAGAGACTTTACAT
siNAA60#1	ATGTGACACCACACAATATTA
siNAA60#2	GCACTTGCTTGTCGCCAAATA
siNAA60#3	GAATCAGAAGAGACTTTACAT
siNAA80#1	ATGACCAGGTGCACTTCTATA
siNAA80#2	AGCCTGCTGGAGACACAATAT
siNAA80#3	CAGGGCAAGGAACTGTCTTTC

Supplementary Table S3 The sequences of the primary probes and FLAP probes.

Probe ID	Sequence (5'-3')
Cy5-tagged FLAP	5'Cy5-AATGCATGTCGACGAGGTCCGAGTGTA-3'Cy5
MAP3K3#1	TGCCAGGAAGTGCCTTCAGAACCTTTTACACTCGGACCTCGTCGACATGC ATT
MAP3K3#2	AGCCAGCATGTCCACAGTTTTTGGCACTTACACTCGGACCTCGTCGACATG CATT
MAP3K3#3	TAGGGTCTGTTTTGCTTTTTTGGAGTGCAGGGTTACACTCGGACCTCGTCG ACATGCATT
MAP3K3#4	GGGGGTGGAGCTCTGTAAGACCCTGAATTACACTCGGACCTCGTCGACAT GCATT
MAP3K3#5	GAGCTGCCACACAGCAGCTTTGGTCATTACACTCGGACCTCGTCGACATG CATT
MAP3K3#6	GCCTGTGTTGTCTTCAGAGGGCAGTGTGTTACACTCGGACCTCGTCGACAT GCATT
MAP3K3#7	CAGCTGCTTTCATTTTCTCTTCTCTCTTACACTCGGACCTCGTCGACATG CATT
MAP3K3#8	GAGGCGTCCGTACCTGTAACAGTCTAGTTACACTCGGACCTCGTCGACAT GCATT
MAP3K3#9	GCTTGTTCTGTGCCCATGGGGATGTAGTTACACTCGGACCTCGTCGACATG CATT
MAP3K3#10	TTTTGGAGGGGAGGGGCCGGAAGAAAGGACTTACACTCGGACCTCGTCGA CATGCATT
MAP3K3#11	TTTGACACAGCTGGTGGTAGCATATGGGTACACTCGGACCTCGTCGAC ATGCATT
MAP3K3#12	TTCCCTTCTACCAGATGGAGTGGGCTTTACACTCGGACCTCGTCGACATGC ATT

Supplementary Table S4 Differential expression analysis of MAP3K family member

Gene_name	siSLU7	siNC	log2FoldChange	pvalue	padj
MAP3K1	206.290607773 963	614.286123146027	-1.573685147	0.000309123118367633	0.0086207188979589
MAP3K2	1839.91778085 711	1563.55534955993	0.234787847348799	0.571393217384828	0.829475965887629
MAP3K3	745.971013799 319	1745.92254157606	-1.226669308	0.003575260164913	0.047437089957036
MAP3K4	809.524111715 58	1122.03477933004	-0.470920023	0.260432441871743	0.587373654629032
MAP3K5	1265.85619172 859	1748.80202355516	-0.466220923	0.261576410030736	0.587373654629032
MAP3K6	157.323466404 418	433.838585217269	-1.462738183	0.000916949723639291	0.0184834192640317
MAP3K7	4705.01645584 836	4308.66150249183	0.126954283224411	0.758165955129118	0.945013880979445
MAP3K8	33.3428311647 098	135.33228240689	-2.017181227	6.87745130045463e-05	0.0027245371552133 3
MAP3K9	391.740631769 58	556.696483424809	-0.506877561	0.232627907810966	0.587373654629032
MAP3K10	367.777988253 753	332.096888010071	0.147149951777312	0.733812992527489	0.931430970540468
MAP3K11	1672.17927659 907	2534.90060377137	-0.600167917	0.147650151807675	0.451204302552028
MAP3K12	854.323836473 027	1392.70608544546	-0.704963765	0.0909725795409292	0.353300782307161
MAP3K13	564.688406585 143	509.664944293415	0.147852970218133	0.729574994206105	0.928027695470114
MAP3K14	1688.84894161 868	2863.16154932845	-0.761529714	0.0665662814914807	0.29942867224258
MAP3K15	170.867569352 945	290.824312604816	-0.766880822	0.0804227794607434	0.327565500139683
MAP3K20	2423.35605651 55	2522.42284853067	-0.057804842	0.889596890424164	1
MAP3K21	57.3054747059 309	125.734008688543	-1.132048124	0.0170738972838695	0.130811408892148
TAOK1	6460.54055301 532	7784.1962502638	-0.268889866	0.513404920146226	0.777972958299221
TAOK2	1892.01048404 211	2948.58618135779	-0.640073473	0.122362956666276	0.425855066173692