Supplement 2. Sequences of primers used for qRT-PCR

Gene	Primer sequence （5'to3'）	Product Size （bp）	Genbank No.
KEAP1	F:CGCCTCATCGAGTTCGCTTACAC R:GCACGGACCACACTGTCAATCTG	107	NM_001114671.1
NRF2	F:AGCACAACACATCCCGTCAGAAAC R:GAGCCTGGTTAGGAGCAATGAAGA	134	XM_013984303.2
PKC	F:CCAGGTCCTCAAGAAGATTGCTCA R:GGGTCATCTCCAGAGTGTTCATTC	146	NM_001004027.1
Pi3k	F:CTCTCGGGAGACCATTCCATCATTG R:TTCTTCATTTCCACCTCTGCCCAAG	84	NM_001190422.1
AKT	F:TTCTGGACAAATCTGAGCCCTAAC R:CGACGGATACAGCGGTCAACTTC	121	NM_214127.2
mTOR	F:CGCCTATTTGCCTATCCTGA	83	NM_214

	CACTC R:GCACGGAAGGGACAGTTCA CAG		01.2
myD88	F:CACGCTCGGTGTATGCCTTC TC R:GCAGCTCATTCATCTGGGTG TAGTC	150	NM_214201.1
NF-κB	F: TTCTGGACCGCTTGGGTAAC R: CACCGTTGGGGTGGTTGATA	120	NM_001048232.1
IL1β	F: ACATGCTGAAGGCTCTCCAC R: CAGGGTGGGCGTGTTATCTT	170	NM_214055.1
IL2	F: CGGATGCTTCCAATCTGGGT R: TTCCCTTTTGCCTCAGGGTC	179	NM_001252429.1
IL4	F: TCCAAACTGGCTGTTGCCTTCTTG R: GGGGTGGAAAGGTGTGGAATGC	132	M86923.1
IL10	F: CGGCCCAGTGAAGAGTTTCT R: TGCCTTCGGCATTACGTCTT	151	NM_214041.1

IFN-α	F: CTCGTGAAGGCGGGAATCAT R: GGTGTGCTCCGGTTCAAGAT	113	NM_001005729.1
TNF-γ	F: GTGCTGTTCCCCAACTCTGA R: GCTTTTTGCTGAGGCTGTCC	79	XM_021091967.1
ERK	F: TCTCCTCCCTCCAGCCAATGT R: CTGAAGAGGACCTGGGAGTAGA	156	AY572787.1
JNK	F:GCTCCACGGAGAAGAACTGCTG R:TGAGTGTCTAGGCTCCAGATGTAG	145	NM_214015.2
MAPK	F: ATGACCCCAGTCAATGCCAG R: CAAAGTAGGGCACCTCCCAG	143	NM_001190042.2
TLR-4	F: CGGATGCTTCCAATCTGGGT R: TTCCCTTTTGCCTCAGGGTC	135	NM_214127.1
OCLN	F: CCTCCTCCCCTTTCGGACTA R: TCACTTTCCCGTTGGACGAG	70	NM_001163647.2
CLDN	F:	95	NM_001

1	ATGACCCCAGTCAATGCCAG		44539.1
	R: CAAAGTAGGGCACCTCCCAG		
ZO1	F: TCAAGGTCTGCCGAGACAAC	140	XM_0210
	R: ATCACAGTGTGGTAAGCGCA		98896.1
β-acting	F: ATGGTGAAGGTCGGAGTGAA	155	NM_0012
	R: CCGTGGGTGGAATCATACTG		06359.1

Supplement 3. Reaction conditions of PCR

PCR reaction temperature	PCR reaction time
98°C	30 s
98°C	10 s
54°C	30 s
72°C	45 s
72°C	10 min
4°C	15 min

Supplement 4. Reaction system of PCR

PCR reaction component	PCR reaction volume
Pusion Hot start flex 2X Master Mix	12.5 μL