

Primers	Sequences (5'- 3')	Remarks
MaCsbD-LE	AAGAAAGCCGAAGATTCAATTGGG	Used to clone the 5' end of MaCsbD
MaCsbD-LR	AGAGTGAGTTGGCAAGAGTTGA	
MaCsbD-RF	AGTCTTGCTAAATGGCTTTCCCT	Used to clone the 3' end of MaCsbD
MaCsbD-RR	AACCGCCAAACGAACCATCA	
Pt-R	CAGCCAAGCCCCAAAAAGTG	Used for screening the MaCsbD - disruption transformants
Bar-F	GCTCTACACCCACCTGCT	
MaCsbD-VF	ACTGGAGAGCGACTCTCG	
MaCsbD-VR	GGACAGCGTCAAAGAAGA	
MaCsbD-CPF	AAGACTACGAATACTTCAATGACC	Used to form pK2-MaCsbD -EGFP-SUR vector
MaCsbD-CPR	TTCTTTCTTTTGCTCAGCCTC	
CP-VF	GTTGGCAGTGAGGTAAGTTGAC	Used for screening the MaCsbD - complement transformants
EGFP-VR	AAGAAGTCGTGCTGCTTCATGTG	
Gapdh-qF	AGATGGAGGAGTTGGTGTTG	Used to analyze the expression of MaCsbD by qRT-PCR
Gapdh-qR	GACTGCCCGCATTGAGAAG	
MaCsbD-qF	AACTGGAATCAGACCGTTGG	
MaCsbD-qR	TGATGTTGGAAATGGCACCT	
qPksP-F	GGCCTGCAGGAAGTCATTCT	Used to verify the transcriptional levels of genes related to melanin biosynthesis-
qPksP-R	ATGAGGAAGCCCGTCAGTTG	
qSCD-F	TGGTTGCTGCTGGGATACTG	
qSCD-R	AGAGTGTTGGTGCGAGGATG	
qTHR-F	GGCATGCCCATGGAAGAGAT	
qTHR-R	TCACCCACTCGCTATCAGGA	
qAbr1-F	TCAACTACAACCTCCACCGGC	
qAbr1-R	GTAGTTGGCACCATCACCGA	
qLAC-F	CGGAGCCGGTAAGTGGAAT	
qLAC-R	GGTTTGTGACCTGGTAGCGA	
qTyr-F	TCCTCTGAACGGGCTAGTCA	
qTyr-R	ACCAGTAAGCTTGGACACGG	
qHppD-F	GATGTGGCCTTTGAGGTGGA	
qHppD-R	GACTTCTTGCCCTCCCGAAA	
qGPX-F	TCGCTGACTACAAGGGCAAG	
qGPX-R	CTGCATGATGGGGAAGCTGA	
qSOD-1-F	CATGCCTATTACCTACAGTA	Used to verify the transcriptional levels of genes related to ROS scavenging
qSOD-1-R	CTTCCAGTTGATGACCTT	
qSOD-2-F	AGACAAGGACACCAAGAC	
qSOD-2-R	GGAGGCGTAGTTGAAGAT	
qSOD-4-F	GGTCAAAGCTGTTGCCGTTT	
qSOD-4-R	CGCCAAAGGTGTGAATGTGG	
qMnSOD-F	CTCCTCTTCTGAACTTCC	
qMnSOD-R	CCGAAATCCTCATTGATG	

qCAT-1-F	GATACGGTAACAGCAATGG
qCAT-1-R	TCGGTCAAGTCAGATACG
qCAT-2-F	TTCTCGCCATCCAATCTC
qCAT-2-R	TCGTCGTTATTCCGTCTC
qCAT-3-F	CCTCTACTCTTCATACCTTGT
qCAT-3-R	GTCGCCATTCTCATTAC
qCAT-4-F	AAGTTCCTCGTTGTTTCATC
qCAT-4-R	TTCCTGGTGAGTTGAGAG
qPOD-F	TGTCGTGTCCAACCTGTACG
qPOD-R	CGCTGTTGGCGATAATGACG
qRAD2-F	AGGAAGTGGTAGTGGCAACG
qRAD2-R	GAGCTGCTGAACTGAGGGT
qRAD3-F	ATCACTCCTGACGGCCTAGT
qRAD3-R	CTTCTGAGACTTTGCCCCGT
qRAD4-F	AAATGCGAAGGAAGCAGGGA
qRAD4-R	TCGAACGAGTTGCTGCAGAT
qRAD10-F	CAGCCCGTACCCCAAAGAAT
qRAD10-R	GCAGGTTGTGAGTCCCATGA
qRAD14-F	ACATGATGCTGTTCTGCGA
qRAD14-R	TCTGTTTCGAGTCTTGCGCTT
qRAD16-F	AAACACGACTTTTGCCGAGC
qRAD16-R	ATGCGTTGTCTGAACGGAGT
qRAD23-F	AGGAAGTGGTAGTGGCAACG
qRAD23-R	GAGCTGCTGAACTGAGGGT
qRAD25-F	CAAGAGGTCACGCACTCCTT
qRAD25-R	CCACTCTTGGCTCGACCATT
qHSP40-1-F	GGCGAAGCGGATCAATTTC
qHSP40-1-R	CATACCTTCGCCAGCGATCT
qHSP40-2-F	CACGACCGAGTTTCAGTGGA
qHSP40-2-R	TGAGAGTGACAGTCGTTGGC
qHSP70-1-F	TGTCGATTTGGGCACCACTT
qHSP70-1-R	GTAGACAATGGCGGTTGGGA
qHSP70-2-F	GCTTGATGTTGCCCCTCTCT
qHSP70-2-R	TGACGCTCACCCCTCAAAGAC
qHSP70-3-F	AGTCCTACATTGGCCGTGTG
qHSP70-3-R	CTTAAGGGCAAGCTCCTGCT
qHSP90-F	AAGAAGGTTGAGGCTGACGG
qHSP90-R	GAGCTTGTGAATGCGCTCAG

Used to verify the
transcriptional
expression of genes in
NER pathway