

**Additional file 1: Table S1. Oligonucleotide primers used for cloning *MaSOD* genes.**

Gene name	Prime sequences (5' - 3')	Tm / °C	Extension time / s	Purpose
<i>MaCSD1A</i>	CSD1A-ORFF: ATGGCAACGGGAGGCAATCTG	55.0	30 (for ORF),	ORF/gDNA amplification
	CSD1A-ORFR: TCAAACCTGCTGACTGAAGACC		140 (for gDNA)	
	CSD1A-3RACEF1: GGGTACACGCATGTGAGGGGAA	57.0	50	3' RACE of <i>MaCSD1A-1</i>
	CSD1A-3RACEF2: GATGAGGAACGTCATGCGGGTGAC	60.2	25	
	CSD1A-3RACEF1: GGGTACACGCATGTGAGGGGAA	57.0	50	3' RACE of <i>MaCSD1A-2</i>
	CSD1A-3RACEF3: TTATGCGGACCAAATTCGGTTCTG	58.3	25	
	CSD1A-5RACER1: AACCACGACTGCCCTTCCAAAATG	58.0	30	5' RACE of <i>MaCSD1A-1</i>
	CSD1A-5RACER2: CTCCCAGAACC GAATTTGGTCCG	58.0	30	5' RACE of <i>MaCSD1A-2</i>
<i>MaCSD1B</i>	CSD1B-ORFF: CACCACTTCTCGAGTCTTCCTC	57.0	30 (for ORF),	ORF/gDNA amplification
	CSD1B-ORFR: CATTCCCTCCACTCACAGACTAC		140 (for gDNA)	
	CSD1B-3RACEF1: CACGGTGCCCTGAAGATGACAAT	58.0	30	3' RACE
	CSD1B-3RACEF2: GAGCAAGTTGTAGAATTCAGTAGTC	57.0	15	
	CSD1B-5RACER1: TGCCTCTCTTGATTAATTGTGCTGC	56.9	35	5' RACE
	CSD1B-5RACER2: ACTCACAGACTACTGGAATTCTAC	58.0	18	
	CSD1C-ORFF: CCTGAGATCACGGACGAAGATGG	57.0	30 (for ORF),	ORF/gDNA amplification
	CSD1C-ORFR: CTCTATGACAAAACCTCAGCATCCAAC		130 (for gDNA)	
<i>MaCSD1C</i>	CSD1C-3RACEF1: GACACCACCAATGGTTGCATGTC	56.0	30	3' RACE
	CSD1C-3RACEF2: GATCTTGAAAAGGTGGGCATGAGCTG	59.0	18	
	CSD1C-5RACER1: CAGCTCATGCCACCTTTTCCAAGATC	57.0	30	5' RACE
	CSD1D-ORFF: GAACATGGTTAAGGCTGTAGCTG	56.0	30 (for ORF),	ORF/gDNA amplification
CSD1D-ORFR: GCAACTGTACAAGCAGCTTCATCC		110 (for gDNA)		
<i>MaCSD1D</i>	CSD1D-3RACEF1: CCATGTTTGACAGCAAGATCGCAC	57.0	24	3' RACE
	CSD1D-3RACEF2: GAGTGACTGATCCAAGGGGAATGAT	58.0	12	
	CSD1D-5RACEF1: CACCAGAATTTCCAGTGGTCTTGC	55.9	35	5' RACE
	CSD1D-5RACEF2: CAGTGCCATCGTCTCCAGCTATC	58.0	27	
	CSD2A-ORFF: ATGCAAGCCACACTCGCCGC	58.0	40 (for ORF),	ORF/gDNA amplification
CSD2A-ORFR: GATTGATACTCAAATTAAGTGGC		270 (for gDNA)		
<i>MaCSD2A</i>	CSD2A-3RACEF1: TCGAGCAGCCTATCTCGGCTTC	57.0	56	3' RACE
	CSD2A-3RACEF2: CTTTCCCAAGGTCGCCTCCTC	58.5	48	
	CSD2A-5RACER1: CCAATGAGATGCTAGAAAACATTAGG	57.0	48	5' RACE
	CSD2A-5RACER2: GATCATCCTCAAGTTCATGAACCAC	58.0	34	
<i>MaCSD2B</i>	CSD2B-ORFF: GTGCCCTTATCTGTACGCCGCTC	58.0	40 (for ORF),	ORF/gDNA amplification
	CSD2B-ORFR: CCATGGGAAGGAGACTGCAACTC		220 (for gDNA)	
	CSD2B-3RACEF1: CCTCTTCCACCGCCAAGCTC	57.0	54	3' RACE
	CSD2B-3RACEF2: CAAGCTGCTTCTTTCACAGACGG	58.0	15	
	CSD2B-5RACER1: GACAACAGGCTTATTAGGTGGCATC	57.0	60	5' RACE
	CSD2B-5RACER2: GATCATCCTCTAGTTCATGAACCAC	58.0	40	
<i>MaMSD1A</i>	MSD1A-ORFF: AAAGCTTGTGGGCGATCGGC	54.0	45 (for ORF),	ORF/gDNA amplification
	MSD1A-ORFR: TTGATACAGCAGAACAGTGACAAC		270 (for gDNA)	
	MSD1A-3RACEF1: GAAAGCCTTCACAACAGCTTCTGG	57.0	56	3' RACE
	MSD1A-3RACEF2: CCCTTCTTGTTCCTGACTAG	58.0	12	
	MSD1A-5RACER1: TGCCCAGCAAAGGAACCAAGTTG	57.0	48	5' RACE
	MSD1A-5RACER2: GACGGAATCCAGAAGCTGTTGTGAAG	58.0	34	
<i>MaMSD1B</i>	MSD1B -ORFF: ATGGCGCTTCGAGCCCTCTTAC	57.0	45 (for ORF),	ORF/gDNA amplification
	MSD1B -ORFR: TCAAGCGATCTCGTGCTGTAACCTTAC		180 (for gDNA)	
	MSD1B-3RACEF1: ACTCACTCGAAGCAGCTCTCAG	58.0	35	3' RACE
	MSD1B-3RACEF2: ACAGGTGTTGCCATGGCGCTTC	61.0	23	
	MSD1B-5RACER1: GG TAGTATGCATGCTCCCACACATCG	60.0	45	5' RACE
	MSD1C-3RACEF1: CGTCACCAACTACAACAACGCCCTC	57.2	45	
<i>MaMSD1C</i>	MSD1C-3RACEF2: CATATCAACCACTCGATCTTCTGG	53.7	45	3' RACE
	MSD1C-5RACER1: CGACAGTGAGCTTCTTAAACCCCTTATC	56.4	42	
	MSD1C-5RACER2: GATTGTCCACCAAGTGAAGTGTGTG	58.0	42	
	MSD1C-ORFF: ATGGCTCTCCGACCCCTCTTC	56.4	42 (for ORF),	ORF/gDNA amplification
MSD1C-ORFR: TCAGGCGGTCTCCTTCTCATAAC		280 (for gDNA)		
<i>MaMSD1D</i>	MSD1D-ORFF1: ATGGCTCTCCGAACCCCTCTTC	56.0	42 (for ORF),	ORF/gDNA amplification
	MSD1D-ORFR1: TTATGCAGTCTCTTCTCATAACTTAC		190 (for gDNA)	
	MSD1D-3RACEF1: GCCTTGGATTGGGTCTCGGC	57.0	48	3' RACE

	MSD1C-3RACEF2: TCCACTGGTGACAAAAGGTTTGC	58.0	24	
	MSD1D-5RACER1: CACGACCGGAAGAGAATGAAAGC	57.0	48	5' RACE
	MSD1D-5RACER2: ACCAAGCAAAGGAACCATGTGCAAAC	58.0	42	
	FSD1A-ContrF: GARTWYCAYTGGGGRAAGCAYCA	57.0	30	Conserved region amplification
	FSD1A-ContrR: GTARTARGCRTGCTCCCAWACATC			
	FSD1A-3RACEF1: CATCTGGAAGGCTTATGGAACATC	56.0	35	3' RACE
<i>MaFSD1A</i>	FSD1A-3RACEF2: CTGGTTGGGCTTGGCTTGCTAC	60.0	30	
	FSD1A-5RACER1: GATAGTAAGCGTGCTCCAGACATCG	60.0	45	5' RACE
	FSD1A-ORFF1: ATGCAGCATCATACTCTTCCTGTTG	55.0	55 (for ORF),	ORF/gDNA amplification
	FSD1A-ORFR: TCATTCAGCCTCCGAATCATCG		240 (for gDNA)	
	FSD1B-3RACEF1: GGTTGCACAATGGAGGAGCTTATC	56.0	57	3' RACE
	FSD1B-3RACEF2: CTTCTGGAATCAATGCAACCTAATGG	56.0	53	
<i>MaFSD1B</i>	FSD1B-5RACER1: CCATTAGGTTGCATTGATTCCCAGAAG	56.0	32	5' RACE
	FSD1B-5RACER2: GATAAGCTCCTCCATTGTGCAACC	56.0	25	
	FSD1B-ORFF: ATCCGCCGTCGTCTACGC	56.2	60 (for ORF),	ORF/gDNA amplification
	FSD1B-ORFR: GTCTCCATAAGATATAACTTTCGCTTC		250 (for gDNA)	
	AUAP: GGCCACGCGTCGACTAGTAC	-	-	Universal primer for 3' RACE
	10UPM: CTAATACGACTCACTATAGGGCAAGCAGTGGTAT	-	-	
	CAACGCAGAGTACATGGGG			Universal primer for 5' RACE
	NUPM: AAGCAGTGGTATCAACGCAGAGT			

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