

**Annexure 1: List of SSR primers used in hybrid purity and molecular validation studies:**

Sr. No	Name of primer	Sequences	Tm*	References
1	SSR31116	F: GAAGGCCATCAAGGTATTACATCT R:CAAACCTTCTACATGATCTTAATCTTT	62 61	ZHANG <i>et al.</i> , 2013
2	SSR20705	F: CCTTTCCTTACCCATCCCAT R: ACCCATTTGAATCAGCTTCG	58 56	ZHANG <i>et al.</i> , 2013
3	SSR00772	F: AGAAGCGTTGGGGGAAAATA R: TGCTACCTCACATGGTTTTG	56 56	ZHANG <i>et al.</i> , 2013
4	SSR11012	F: TCGTAATTTATGAAAATAGAACGGT R: CGATTGCGCAAATGTGTAT	58 54	ZHANG <i>et al.</i> , 2013
5	SSR16882	F: CACCTCAACTCCTCCATTCAA R: TGGAGGTCATTGAGACTTGCT	59 59	ZHANG <i>et al.</i> , 2013
6	SSR16110	F: GGAATATGGAAGGAAAGCCA R: ATCCCAATTTCCTCCAAAAC	56 56	ZHANG <i>et al.</i> , 2013
7	SSR21558	F: GTGGGGGATGTGATTACAGAC R: CATCATCCATTCCCCTCAAC	60 58	ZHANG <i>et al.</i> , 2012
8	SSR20054	F: GTTTGTGAGGGAAACGCAAT R: TCAAAAAGCTTCCTTCCTTCA	56 55	ZHANG <i>et al.</i> , 2012
9	SSR00116	F: CCCTCTCCCCTCCATGTAAT R: CGTGAAAAGAGAAAACGATGG	60 57	ZHANG <i>et al.</i> , 2012
10	SSR15914	F: GTGAGTCAAGCCGAAAGGAG R: TCCACTTGCTTTTCAACACG	60 56	ZHANG <i>et al.</i> , 2012
11	SSR15698	F: TCGTTAACCTAATGTTGGCA R: TCATTCAAGAATTCGTCCA	57 54	ZHANG <i>et al.</i> , 2012
12	SSR23474	F: CATCAACTTTGGCACATTGG R: GACCAATCCATGTAAAGAGTTT	56 59	ZHANG <i>et al.</i> , 2012
13	SSR05723	F: TGGCTTTTCTGTCACGTCC R: TCCATGGTACAACAAGAATCACA	57 59	ZHANG <i>et al.</i> , 2012
14	SSR15818	F: GGACATGTCAACTCCCCTGT R: GCCTCTAGCCTGAAAGACCA	60 60	MIAO <i>et al.</i> , 2011
15	SSR06003	F: TGAGGGGCAAATTTGGTAAA R: TTGGGTGTCAAATGGAAGAA	54 54	MIAO <i>et al.</i> , 2011
16	SSR01331	F: CGGGATTTACCCCTCACATT R: GTGGGACCGAGAAGTTTGAT	58 58	MIAO <i>et al.</i> , 2011
17	SSR18405	F: CGCAGGTGCATCTCATGTAA R: GACAAACAAGGGGACGAAAA	58 56	MIAO <i>et al.</i> , 2011
18	SSR02309	F: TGAAATGCCTCTGCAATGAC R: GGCATAAAAATCCTCGGTT	56 56	MIAO <i>et al.</i> , 2011
19	SSR00004	F: TTCATTGCAAAGCACACACA R: TGAAAAGAGGGAAACAAAAGCA	54 54	MIAO <i>et al.</i> , 2011
20	SSR13251	F: GGTCATCCAAAAGAGAAAGCA R: ATCAACACCATTGACGACCA	58 56	MIAO <i>et al.</i> , 2011
21	SSR10018	F:GGGTCTAATATTTGGGGATGG R:GGTTGTTCTTGTGGAATGTG	59 56	LV <i>et al.</i> , 2012
22	SSR11340	F:TTGTTTTTGTGGGCACTCA R:GTGCATCACTCACCCCTTC	54 59	LV <i>et al.</i> , 2012
23	SSR05723	F:GGGTGTAATTGGCTTTTCTG R:GGTTCTAATCCAACGAGTGC	56 58	LV <i>et al.</i> , 2012
24	SSR16695	F:GGACTAGAAACACAATCCCACG R:GTTTGGTTTGCTTCAAGTAGGTTTC	62 62	LV <i>et al.</i> , 2012
25	SSR16226	F:GCGTTAAAATTCCCAACGG R:GGAGAGAAATTGGAATTCGGCAG	55 63	LV <i>et al.</i> , 2012
26	SSR23220	F:GGGATGGGATCTGGGTTTG R:GTGTGAAATATGTGGAGGGAG	59 62	LV <i>et al.</i> , 2012
27	SSR22653	F:TGAATTTCTTTGGTGGATTCAA R:GGGAGAAGAAGGGGAGATTG	55 60	LV <i>et al.</i> , 2012
28	SSR23370	F:GATTATGAGGATGAACCACCC R:GCCAACAACTCTCTTATCGAAC	60 64	LV <i>et al.</i> , 2012

29	SSR01738	F:GCGTAGGGAAAAGTAAATCAAATAGG R:GGCATAAGAAATGATACGAACC	63 58	LV <i>et al.</i> , 2012
30	SSR16056	F:GGGTTTGATAGTGGAGATTATTCA R:GGTCTTTTCCACTCAATCCATT	60 58	LV <i>et al.</i> , 2012
31	SSR05012	F:TTTAATGGCGTCGAAATGGT R:GTTCCATTAACGAGCTTCCC	54 58	LV <i>et al.</i> , 2012
32	SSR11043	F:TACACCTCTGCGAAGCACC R:GTTTCGCACTCACTCTTACCG	59 62	LV <i>et al.</i> , 2012
33	SSR05125	F:GCACATTCAAATTTACTTGGGAG R:GCTTTAAGTTTGATGGTAGGGTAG	59 62	LV <i>et al.</i> , 2012
34	SSR07543	F:GGTTTGGCTTTCCTTTCCTC R:GGTTCCCAAATCAAACCTCAC	59 59	LV <i>et al.</i> , 2012
35	SSR19998	F:CTTTGCCAAGCATCTCACC R:GTTTGCCTCTGCGGTTCTG	57 59	LV <i>et al.</i> , 2012
36	SSR02895	F:GTGAAGAAATGAGTTGGCAAGTC R:GGAGGGAATGTTGGATCAGC	61 60	LV <i>et al.</i> , 2012
37	SSR20852	F:GGTTTCCATTGAACTCGTAGC R:GGCTGTCCATTTTGTAGAACC	59 59	LV <i>et al.</i> , 2012
38	SSR31399	F:AGCTCCGAGGATACCCATCT R:AGAAGAACACCTGGAACAGACA	60 60	LV <i>et al.</i> , 2012
39	SSR20218	F:TCGCCCACGTCCTCTATATC R:GCTAATGAAGGGGGAGGAGA	60 60	LV <i>et al.</i> , 2012
40	SSR29620	F:TGCTTGGAAGTTTGTCTGTCTC R:GGTTTATTGGATGATGGGTC	59 56	LV <i>et al.</i> , 2012
41	SSR14861	F:CGGTAGTCTACTTGGTTGAAATG R:GTAAATAGGACGAAGGAAAACCAC	61 62	LV <i>et al.</i> , 2012
42	SSR13787	F:GCAACTCCAACCAATCCCTC R:GGCAGCTAAATCAACTCACC	60 59	LV <i>et al.</i> , 2012
43	CSWCT28	F: GAATTCAAAAGCATTTCAAAATA R: GAATTCATTGGGTTTTTGAACCC	55 59	MIAO <i>et al.</i> , 2011
44	SSR19914	F: ATGGTCCACCAAACAAATGG R: GCTGTACTTGGAATCACTTCCC	56 62	LU <i>et al.</i> , 2014
45	SSR14445	F: TCCATGGAAATTGAAAACCC R: CGATCCTTATCGAACAGCCT	54 58	LU <i>et al.</i> , 2014
46	SSR17922	F: CATTCTAGGTCAATGAATCGCA R: GCAAAGTTGCCACATTGAAG	58 56	LU <i>et al.</i> , 2014
47	SSR16695	F: CACAATCCCACGAAGAACAA R: TGCAATTATGGCAAATCAAAA	56 52	LU <i>et al.</i> , 2014
48	SSR22638	F: TGTGTAAGATTTTTATTGGATGCC R: CTGAGCTTGATCAATTCCTTCA	58 58	LU <i>et al.</i> , 2014
49	SSR00262	F: CCGTTGGTCTTGGACTCTCA R: TGTA AAAAGTGATCAGGAGGGTCT	60 61	LU <i>et al.</i> , 2014
50	SSR22144	F: AGGCTTACAGAACAGCATTAA R: GCTGAGGAACAATGGTAAAT	54 54	LU <i>et al.</i> , 2014
51	CSN076	F:ATCTATAATACTACATGCACAC R:AATTGCACTTACAATGAGA	55 49	FUKINO <i>et al.</i> , 2008
52	CSN160	F: GTAGCAGAAGCCTCACCGGAGTAA R:CTTGTAGCAGAAGGCTTCCACGTT	67 65	FUKINO <i>et al.</i> , 2008
53	CSN161	F: GTCCTTTCTGCCATTTTCTTGGGT R:CCCAAATTTAGTGGCTTCAACATCA	64 63	FUKINO <i>et al.</i> , 2008
54	CSN184	F: CTTTATCTTCGGCTTTGATGTCCG R:TCCATAGCAGTTCCCAATGTCTT	64 64	FUKINO <i>et al.</i> , 2008
55	SSR19190	F:TGAGAAAAGAAAATGAGAAGGAATTG R:GCTTTTGCCATTGTCTGT	59 56	YOSHIOKA <i>et al.</i> , 2014
56	SSR33278	F:GCAAACGCAATTTAAAACACG R:GTTGGAATGAGGGAGTGAGC	54 60	YOSHIOKA <i>et al.</i> , 2014
57	CSWCT24B	F:ATCGCTTTATCTTCGGCTTTGATG R:AATCCATAGCAGTTCCCAATGTCC	62 64	YOSHIOKA <i>et al.</i> , 2014
58	CSWTA13	F:AGATGGGCAGTTAGAGTTGATGCT R:CATTTAAAGCCTCATCAACACCTC	64 62	SIGVA <i>et al.</i> , 2015

59	SSR190	F:TTCTGAAACGACACCTCCAG R:TCCCCTTCTAATTTACCTTCCA	58 58	SIGVA <i>et al.</i> , 2015
60	SSR1115	F:ATTCCCAATCCCAAAAAGGT R:CTCCTCCTCCAATGAGCAAG	54 60	SIGVA <i>et al.</i> , 2015
61	SSR3411	F:GTTGGAGTCGTGGAGAGAGC R:ATTTGAAGGGAGACGTGTGG	63 58	SIGVA <i>et al.</i> , 2015
62	SSR1091	F:CTCATCTCCGAACCTCCAAC R:TGGTAACAAGGTGGATCGAA	60 56	YOSHIOKA <i>et al.</i> , 2014
63	SSR2734	F:TGTTGTTGGACCCCTTCAAT R:TGTCAAAGGAGGAGGTGGAG	56 60	YOSHIOKA <i>et al.</i> , 2014
64	SSR2733	F:TTGTTAGGTAAGCCATGCC R:TTGCCTGAGGAAGAATCTGA	58 57	YOSHIOKA <i>et al.</i> , 2014
65	SSR3076	F:GGGATGTAGGAGGGGATTGT R:TCGTTTATGACAGCATTCCA	60 55	YOSHIOKA <i>et al.</i> , 2014
66	CMN01_74	F:GCTTTCCTTCCCTCGTATC R:AATTGCACGCACAAAAGTACA	60 54	YOSHIOKA <i>et al.</i> , 2014
67	CSN002	AAAATGGGAAAAGTGGGA GCCTTAACTAAATGACAAA	45 49	FUKINO <i>et al.</i> , 2008
68	CSN009	AATGAGATGGCTATCCCTAAA ATTGCCTCAACTTATATAGACTG	55 58	FUKINO <i>et al.</i> , 2008
69	CSN010	GATGAATCGGTGAAGGT AAGTCAAGTAATTCATAGGTG	50 54	FUKINO <i>et al.</i> , 2008
70	CSN031	GCAGAAGCCTAAGAAGGCTGAGAA AGGTTGCGTCTTCTCTGACCCAA	65 64	FUKINO <i>et al.</i> , 2008
71	CSN035	CAGTGGAACACCCACTTTTCCTC TAAGTACGAGCATCCACAGCCAA	67 64	FUKINO <i>et al.</i> , 2008
72	CSN057	TCAACAGAGCAATATTCCTTCATAGG AAACCCCTTGGAATTTGTTGTCT	65 62	FUKINO <i>et al.</i> , 2008
73	CSN061	ACTTCAATTCATATACTGTG TACCACTGGGATCCTAA	54 50	FUKINO <i>et al.</i> , 2008
74	CSN064	AGCCCAATCCAAGAAGA TTTGAAGTGTCTCAAAGTAACCC	54 59	FUKINO <i>et al.</i> , 2008
75	CSN066	GGATCCGAAATAGAGAAAGGAAA GTTGTTGGGTGTTAATGTGAAA	59 58	FUKINO <i>et al.</i> , 2008
76	CSN069	GATGTATGCTTATTTATACCCAA AGAAAATTAATCAAGACCTCTC	56 55	FUKINO <i>et al.</i> , 2008
77	CSN075	ACCGTGGTGTCTGTTTTACGGAT GAAGCATTTCGTGTAGGGAGGAAGA	64 65	FUKINO <i>et al.</i> , 2008
78	CSN080	GGGTATTAATTAGGATGTGAAGCGA GGGAATTCGATTGTTTAGCCTTGT	63 62	FUKINO <i>et al.</i> , 2008
79	CSN092	GAACAAACCCCAAGAAAATCA CGACCCTTCTCTCTGTTTCCA	62 65	FUKINO <i>et al.</i> , 2008
80	CSN104	AGCAAGACTATAAACTTTTCGAATCT TGTCTATAAACGACAACCTTCTCTC	60 61	FUKINO <i>et al.</i> , 2008
81	CSN114	CTTTCAAAATTCGAGGCAAAACCC TGATCCAATGATGTAAGAGGGTGTG	62 64	FUKINO <i>et al.</i> , 2008
82	CSN120	TGATAGAGAGGCAGATTTAGATAC CTCACAACCAAAAAGGTCAAA	60 54	FUKINO <i>et al.</i> , 2008
83	CSN018	TGCTTTCCCTCAAACCTACACCCC CCAAATGGGGTTCACAAAGAAAC	65 62	FUKINO <i>et al.</i> , 2008
83	CSN125	GCAACCATGTTTGGGTCAAATGAT TTTGTGCGTGTGAATTGGAAGAC	62 62	FUKINO <i>et al.</i> , 2008
84	CSN126	GCAGAAGCCTTATTCTCCAGAG AATTGGTGTATTGTGAGGGGTGG	65 64	FUKINO <i>et al.</i> , 2008
85	CSN131	TGTTTAGCCTTGTAGCAGAAGCACC AACAGTGGGCATATTGCTGATCT	66 64	FUKINO <i>et al.</i> , 2008
86	CSN 132	TATTGCATAACATACCTGGGGA ATAACCAATTCGGCAAATACAGC	61 62	FUKINO <i>et al.</i> , 2008
87	CSN134	TCATTTACGGTAAAAGTCACACC GAAAGAAACATGCACACTTGTCTCGG	62 64	FUKINO <i>et al.</i> , 2008

88	CSN135	ATTCGATCTCTATATTTTACTCC CACAATGTTTGACATATAGAC	56 54	FUKINO <i>et al.</i> , 2008
89	CSN144	TGTTTGTGGCTTCGTATGGAGAA ACCATTCCGACCTGCATGTTACTT	62 64	FUKINO <i>et al.</i> , 2008
90	CSN147	CCACCCAACCAAAAAGCAGTAAAC GATGGGAGCAAATGTTGGTTTTGT	64 62	FUKINO <i>et al.</i> , 2008
91	CSN159	TGGTTCAGAAAGGGGAAAATCAGA TTTCACACCATTTACGGTTATGGG	62 62	FUKINO <i>et al.</i> , 2008
92	CSN166	CGTTCCTTCCCCTCTTTCACATTT TTTGATGATGATGATGATGAGCCG	64 62	FUKINO <i>et al.</i> , 2008
93	CSN171	TGCACAACAGTGTTTAGCTTGATGA TGAAGCCGAAGTAGATGAGACCTTC	63 66	FUKINO <i>et al.</i> , 2008
95	CSN172	TCTCAACCCAGATTTGACCTACCA CCCCTGGAAGTAAAGGTGACACTG	64 67	FUKINO <i>et al.</i> , 2008
96	CSN173	CAACATTGAAGTTCAATATGTTT CTATAGGGCGAATTGGG	56 52	FUKINO <i>et al.</i> , 2008
97	CSN183	TGGACCACGTGAAAGATTCAGAAA GCCTACAACCTATCCCAAATGGAGC	62 65	FUKINO <i>et al.</i> , 2008
98	CSN190	CCACGGGTTGACTACAAATTCCTT GCAGAAGCCTGATATTTACAAGCCA	64 64	FUKINO <i>et al.</i> , 2008
99	CSN 191	TAGATTTTTTCATGAAGGGCGTTGG CGTCATTGTGACTGGAGGTAGCAT	62 65	FUKINO <i>et al.</i> , 2008
100	CSN192	CTTATAATGGGAAAGGTAAGA CTGACCCACTAGTTACA	54 50	FUKINO <i>et al.</i> , 2008
101	CSN208	TGCATCTGGTCTCCTTCTTCTTGT AATGAGGCTTTTTGGAAGAGGAGG	64 64	FUKINO <i>et al.</i> , 2008
102	CSN221	GAGAACCACTTTTCCGGCAAATAA CAAAGGTTGGATCTTGTGTCCA	62 62	FUKINO <i>et al.</i> , 2008
103	CSN232	AGCATTCTATTCATTTGGAGGCA TTTTCTTTGAAACTGAGTGGTGTGCG	59 63	FUKINO <i>et al.</i> , 2008
104	CSN263	ATTACAACCACAAGTGGCGAGACA AGCTGATTTCAACCACAGCTTCAA	64 62	FUKINO <i>et al.</i> , 2008
105	CSN282	GGAAAATGAAATCATGTGCTCCTC TCGTCACTTAAGTTACCTGGTTTTGC	63 65	FUKINO <i>et al.</i> , 2008
106	CSN284	AGCACCCCGGATTTCTCTTTGAT TAAAGAGGCGAAAAGTTCGGAAGC	64 64	FUKINO <i>et al.</i> , 2008
107	CSN287	AGGGAGATAGTATGACAAGATTTCCCTC AGTGGGGTTGAGCAAGTTGAAGAC	65 65	FUKINO <i>et al.</i> , 2008
108	CSN293	TCATGTTCAAATCTCATTCCCCCT ATAAAGAACACACATGGTGGTGGC	62 64	FUKINO <i>et al.</i> , 2008
109	CSN295	GCAACTAACCCATAAATGAAGAGATGC TCAAAGGCAATGGACCTTACACA	65 62	FUKINO <i>et al.</i> , 2008
110	CSN306	TTTCTCCCCTTCTTCATTCTC CAACCCAAATGCTTAGAGAACCCA	64 64	FUKINO <i>et al.</i> , 2008

T<sub>m</sub>\*- Melting temperature