

Appendix A. Loci summary

Locus	Multiplex	BTA	Relative Position (cM) ^a	Number cattle alleles ^a	Number bison alleles	Bison observed Het %	Bison	
							PIC	Label ^b
AGLA17	93	1	0.0	4	1	0	0.00	HEX
BM6438	9	1	1.6	6	5	61	0.52	HEX
BM6438-29	51	1	1.6	0	5	73	0.64	HEX
TGLA49	9	1	1.9	7	1	0	0.00	HEX
BM8139	44	1	8.2	7	2	41	0.32	HEX
INRA117	Single	1	8.4	5	4	58	0.47	TET
BMS574	18	1	14.0	10	5	56	0.50	TET
BMS2321	21	1	14.0	10	4	50	0.43	TET
BMS4015	38	1	28.2	12	6	59	0.50	HEX
BMS4017	92	1	34.8	9	10	77	0.74	HEX
BM4307	4	1	35.2	6	4	47	0.33	6FAM
MILSTS080	44	1	39.0	4	4	59	0.53	TET
BMS4037	36	1	40.3	8	7	75	0.65	HEX
TGLA57	7	1	46.2	8	6	86	0.73	6FAM
RM326	35	1	55.6	8	7	73	0.66	TET
BMS527	2	1	55.9	12	6	77	0.67	6FAM
INRA119	93	1	68.7	4	4	63	0.56	HEX
BM7145	21	1	69.2	2	2	36	0.30	TET
BM6506	42	1	69.2	6	6	81	0.69	HEX
BMS4008	11	1	71.7	10	3	47	0.35	6FAM
BMS4023	43	1	75.0	2	3	36	0.31	HEX
BMS4031	14	1	77.7	10	6	75	0.73	HEX
BM864	45	1	88.2	14	4	39	0.45	TET
BMS4028	44	1	95.6	12	2	3	0.03	6FAM
BMS4040	16	1	98.8	10	1	0	0.00	TET
BMS4019	92	1	98.8	2	4	23	0.22	HEX
BMS1789	45	1	100.9	11	2	3	0.03	TET
BM1824	12	1	108.6	6	8	77	0.74	6FAM
BMS599	45	1	125.8	14	7	72	0.78	6FAM
PIT16b6	Single	1	-	0	2	6	0.06	HEX
PIT17b7	Single	1	-	0	9	75	0.72	HEX
TGLA44	48	2	0.8	16	5	63	0.53	TET
INRA040	49	2	7.5	36	9	71	0.77	HEX
TEXAN2	31	2	22.5	9	6	69	0.54	HEX
URB042	50	2	33.9	10	1	0	0.00	TET
CSSM42	22	2	34.4	11	3	59	0.53	HEX
ETH121	22	2	34.4	12	5	73	0.62	6FAM
ILSTS030	57	2	35.3	5	2	50	0.34	HEX
BMS803	21	2	41.0	11	2	38	0.34	HEX
BM4440	3	2	55.0	11	6	77	0.74	TET
BMS2024	34	2	55.0	9	9	79	0.81	TET
BM2808	46	2	59.9	6	7	71	0.71	6FAM
ILSTS050	57	2	61.3	5	8	81	0.70	6FAM
BMS2	21	2	61.6	2	1	0	0.00	6FAM
BMS353	52	2	63.0	7	6	80	0.76	HEX
RM041	47	2	69.0	7	6	64	0.63	HEX
ARO28	49	2	87.8	7	6	75	0.66	TET
BM6444	43	2	88.4	5	6	63	0.60	HEX
BM1223	38	2	92.1	6	8	61	0.56	TET

BMS2267	113	2	100.0	7	6	57	0.66	6FAM
BMS356	113	2	100.3	5	2	13	0.11	NED
BM4117	113	2	100.9	5	4	70	0.61	HEX
BMS2519	113	2	101.5	12	3	25	0.29	HEX
BM2113	2	2	106.2	11	7	78	0.74	6FAM
OARFCB11	Single	2	120.4	14	6	60	0.584	NED
INRA006	28	3	19.5	8	3	35	0.27	TET
BMS2904	33	3	28.3	5	5	59	0.48	HEX
RM065	47	3	32.1	5	6	71	0.71	6FAM
CSSM54	46	3	33.7	3	1	0	0.00	HEX
BMS963	40	3	35.6	8	7	61	0.66	6FAM
BM723	40	3	47.3	9	4	66	0.55	HEX
RM3	48	3	47.3	2	4	30	0.28	HEX
BM4129	32	3	52.3	9	2	2	0.02	6FAM
INRA003	31	3	59.5	10	8	45	0.73	HEX
HUJ246	11	3	67.9	6	5	78	0.68	TET
HUJII77	27	3	87.4	11	1	0	0.00	TET
BMS2145	50	3	93.9	7	5	67	0.57	TET
BM7225	46	3	102.4	8	7	77	0.81	HEX
BMS896	46	3	114.9	7	4	62	0.59	6FAM
BMC4214	19	3	123.0	13	5	70	0.71	HEX
BMC1410	6	4	0.0	11	1	0	0.00	TET
BMS1788	38	4	8.4	12	5	58	0.54	TET
BMS827	13	4	24.7	10	2	52	0.35	HEX
BMS1172	1	4	27.3	9	6	78	0.69	6FAM
BMS1237	47	4	30.6	26	7	79	0.67	TET
BMS1840	47	4	41.7	8	3	39	0.34	6FAM
BMS2172	24	4	49.6	9	4	69	0.68	6FAM
INRA072	47	4	59.3	12	6	71	0.67	HEX
BMS2571	34	4	66.3	7	6	60	0.60	TET
BMS2809	11	4	72.0	10	2	5	0.05	HEX
BMS1074	42	4	74.9	5	4	75	0.69	HEX
LEP	126	4	82.8	5	6	77	0.71	6FAM
BMS648	Single	4	87.4	6	2	14	0.15	TET
RM088	55	4	94.8	10	2	44	0.36	TET
TCRB	43	4	97.2	2	3	44	0.36	HEX
BMS1095	19	5	0.0	13	2	43	0.31	6FAM
BM6026	112	5	6.7	10	2	0	0.06	6FAM
BMS610	18	5	12.8	12	4	53	0.41	HEX
RM103	91	5	28.6	10	3	23	0.19	TET
BMS1315	22	5	31.8	7	5	56	0.49	HEX
BMC1009	16	5	40.0	11	4	61	0.40	HEX
CSSM34	56	5	44.4	9	8	83	0.78	6FAM
BL37	100	5	50.2	10	4	66	0.63	TET
RM500	8	5	55.6	4	1	0	0.00	6FAM
BR2936	132	5	64.3	8	6	60	0.55	TET
CSSM22	17	5	71.1	9	6	64	0.62	TET
IGF1	51	5	74.0	4	5	61	0.50	TET
BMS1248	105	5	87.0	14	3	59	0.51	6FAM
BMS1658	111	5	102.0	10	6	64	0.69	6FAM
BM2830	132	5	113.5	19	10	90	0.82	NED
BM49	108	5	115.0	11	4	36	0.35	HEX
ETH152	104	5	118.3	7	6	83	0.74	6FAM
INRA133	27	6	8.2	6	6	58	0.67	HEX
BM1329	38	6	35.5	8	5	72	0.61	6FAM
BMS2508	31	6	44.2	9	2	36	0.30	6FAM

BMS382	131	6	49.7	7	2	17	0.17	6FAM
BMS1242	131	6	50.1	10	2	2	0.05	6FAM
BMS690	131	6	51.9	7	5	46	0.38	6FAM
BMS518	106	6	55.2	6	6	70	0.59	HEX
BMS360	12	6	66.5	11	6	75	0.71	6FAM
BM4621	34	6	72.3	6	5	48	0.48	6FAM
ILSTS035	18	6	81.0	18	3	48	0.37	6FAM
CSN3	21	6	82.6	5	2	38	0.27	6FAM
BMS2460	26	6	86.2	7	4	42	0.39	6FAM
BM4311	10	6	89.7	7	4	50	0.62	6FAM
ILSTS018	127	6	89.8	3	3	51	0.34	6FAM
BM8124	13	6	94.2	11	5	75	0.70	6FAM
BMC4203	55	6	112.9	8	6	69	0.65	6FAM
BM7160	106	7	0.0	8	4	44	0.41	TET
BMS713	110	7	15.2	10	6	58	0.47	HEX
BM2607	22	7	29.1	3	4	9	0.09	6FAM
BMS1116	5	7	30.5	5	3	30	0.23	6FAM
IL4	14	7	30.5	9	9	81	0.85	6FAM
BM6105	105	7	35.7	10	3	52	0.42	6FAM
BMS2258	12	7	75.0	11	8	78	0.79	HEX
BM1853	40	7	85.3	5	2	59	0.37	6FAM
BM9065	101	7	102.4	7	5	64	0.60	TET
BMS1979	12	7	124.4	11	4	67	0.57	TET
BL1043	107	7	134.1	14	1	0	0.00	6FAM
BMS1864	123	8	0.0	6	2	14	0.12	6FAM
RM372	1	8	19.1	10	8	80	0.78	HEX
BP2	29	8	26.3	8	2	11	0.10	TET
BMS678	106	8	38.4	10	5	22	0.22	HEX
BM4006	102	8	47.1	9	5	53	0.46	6FAM
INRA122	100	8	51.9	6	3	50	0.36	TET
BMS2072	24	8	58.8	9	5	68	0.70	HEX
IDVGA52	25	8	75.0	14	6	67	0.64	HEX
BM3412	100	8	78.6	10	5	67	0.68	HEX
BM711	35	8	83.6	9	5	53	0.47	6FAM
BMS2847	105	8	112.2	10	7	83	0.76	HEX
BM757	17	9	0.6	10	6	56	0.51	HEX
BMS47	30	9	4.9	8	7	56	0.58	6FAM
ETH225	58	9	8.1	10	5	47	0.52	TET
BM2504	107	9	25.2	7	11	86	0.81	TET
BMS817	108	9	38.0	9	3	33	0.28	6FAM
BMS555	5	9	39.1	10	2	38	0.35	6FAM
BMS434	11	9	51.6	10	3	35	0.36	TET
BMC701	15	9	56.7	12	4	76	0.64	HEX
BMS2377	105	9	63.8	6	5	61	0.44	TET
BMS1724	26	9	74.1	7	1	0	0.00	TET
BM4208	111	9	84.6	7	1	0	0.00	HEX
BMS2295	21	9	91.5	10	6	64	0.61	6FAM
BMS1967	14	9	102.5	12	5	22	0.27	TET
BMS528	18	10	19.0	12	5	78	0.59	6FAM
BMS2349	16	10	22.1	15	3	22	0.25	6FAM
SPS113	19	10	29.2	0	3	50	0.37	HEX
BRN	101	10	29.2	14	3	50	0.37	HEX
BMS2742	109	10	38.5	14	7	72	0.69	HEX
BM875	101	10	46.5	7	6	81	0.77	HEX
BMS419	15	10	51.1	15	7	75	0.66	HEX
INRA071	101	10	59.3	12	5	75	0.72	6FAM

INRA037	26	10	69.9	15	6	75	0.69	6FAM
BMS1318	Single	10	73.1	8	8	77	0.78	TET
BMS614	14	10	89.5	12	3	29	0.27	TET
CSSM46	7	10	92.9	13	2	20	0.16	TET
BMS2614	6	10	98.4	8	9	81	0.80	TET
BM9067	120	11	9.5	17	7	58	0.50	TET
BMS2325	101	11	11.7	6	10	83	0.76	TET
RM096	101	11	31.3	9	2	3	0.03	6FAM
BM7169	15	11	41.0	13	2	39	0.37	6FAM
BMS1716	11	11	47.7	10	5	67	0.61	HEX
ILSTS036	29	11	56.9	9	3	24	0.20	HEX
RM150	32	11	65.5	14	1	0	0.00	HEX
BM8118	124	11	72.4	9	8	86	0.80	HEX
BMS2047	14	11	73.8	20	2	33	0.28	6FAM
BM9146	92	11	74.1	3	3	58	0.53	6FAM
IDVGA3	101	11	76.9	10	1	0	0.00	HEX
BL1103	27	11	90.9	12	2	9	0.11	TET
BMS460	4	11	102.6	10	3	52	0.44	HEX
ILSTS045	38	11	106.4	8	3	53	0.42	HEX
BMS410	1	12	0.0	15	7	67	0.58	TET
BMS2252	100	12	15.1	12	8	75	0.67	6FAM
BMS2057	106	12	20.7	12	5	38	0.37	TET
RM094	55	12	41.7	9	3	41	0.34	HEX
BMS975	32	12	61.2	8	5	66	0.63	HEX
BMS585	7	12	79.7	4	3	50	0.46	HEX
BM4028	18	12	79.7	13	4	80	0.63	6FAM
INRA5	130	12	83.1	4	4	49	0.47	HEX
BMS1316	103	12	98.7	14	1	0	0.00	TET
BMS2724	100	12	105.8	8	6	72	0.70	TET
BMC1222	124	13	19.5	14	4	21	0.24	6FAM
BMS1352	102	13	31.1	8	8	80	0.81	TET
BM720	3	13	38.6	14	7	71	0.68	TET
HUJ616	104	13	43.8	8	8	71	0.68	6FAM
BM9248	6	13	52.8	13	5	52	0.55	TET
RM327	102	13	62.1	12	5	52	0.56	HEX
BL1071	109	13	68.6	9	11	81	0.84	HEX
AGLA232	25	13	79.5	15	6	66	0.62	TET
BMS2319	55	13	85.3	7	6	66	0.57	HEX
BMS1747	36	14	4.2	9	4	67	0.56	6FAM
RM011	122	14	27.7	12	5	80	0.72	HEX
ILSTS008	19	14	35.2	2	3	30	0.27	TET
BMC1207	102	14	36.2	10	2	5	0.05	TET
BL1029	122	14	42.8	13	2	52	0.35	TET
BMS108	107	14	50.8	10	4	33	0.29	TET
BMS947	9	14	52.8	12	4	45	0.48	TET
BM4513	9	14	62.5	10	2	23	0.20	6FAM
RM66	109	14	65.3	3	5	50	0.51	TET
BM2934	13	14	66.4	8	2	52	0.36	6FAM
BL1036	30	14	78.7	10	5	70	0.68	TET
BMS2055	19	14	84.1	10	1	0	0.00	6FAM
BMS2533	10	15	5.2	16	2	50	0.37	6FAM
BMS1004	20	15	7.2	11	3	20	0.17	HEX
ADCY2	102	15	12.1	9	5	77	0.65	HEX
JAB8	114	15	20.8	9	5	70	0.67	6FAM
HEL1	106	15	27.7	8	4	63	0.61	6FAM
BMS2684	16	15	34.9	13	1	0	0.00	HEX

PTH	126	15	34.9	2	1	0	0.00	HEX
BM4325	128	15	59.9	6	8	63	0.67	TET
BMS812	108	15	68.8	14	6	83	0.68	TET
BMS2076	56	15	75.4	7	4	20	0.17	HEX
BMS820	14	15	81.6	15	2	31	0.23	HEX
BMS429	104	15	93.4	9	3	31	0.26	TET
BMS1348	110	16	12.8	7	7	75	0.76	HEX
BM121	17	16	24.4	19	5	43	0.43	TET
TGLA53	52	16	40.6	13	6	55	0.57	6FAM
BR6504	Single	16	51.2	10	5	75	0.62	TET
IDVGA49	108	16	56.5	9	4	42	0.36	TET
INRA048	105	16	73.0	15	1	0	0.00	6FAM
BM1706	3	16	80.6	10	6	55	0.52	6FAM
BM3509	26	16	84.5	29	6	70	0.67	HEX
BMS1825	130	17	3.8	18	4	3	0.06	6FAM
OARVH98	114	17	12.8	11	4	71	0.59	TET
BMS941	4	17	30.1	13	3	55	0.52	TET
BM305	127	17	51.9	18	10	59	0.61	6FAM
BMS1167	128	17	64.7	7	4	58	0.48	6FAM
BM8125	112	17	73.9	7	1	0	0.00	HEX
BM1862	23	17	86.3	16	6	80	0.72	6FAM
BM1233	102	17	98.6	8	6	56	0.54	HEX
BMS1355	31	18	2.8	9	4	66	0.62	TET
BMS1322	25	18	13.8	6	3	40	0.32	HEX
BMS2213	16	18	26.2	11	2	25	0.25	6FAM
BM7109	101	18	49.6	6	3	41	0.44	6FAM
BMS2639	1	18	57.0	13	6	84	0.76	6FAM
BM2078	20	18	77.8	11	1	0	0.00	6FAM
BM6507	11	18	78.9	7	3	63	0.56	TET
TGLA227	8	18	84.7	13	1	0	0.00	HEX
BM9202	109	19	0.0	10	7	76	0.69	6FAM
BMS745	40	19	15.9	7	7	79	0.75	TET
BMS2142	11	19	44.7	13	8	70	0.62	HEX
BMS650	56	19	56.5	15	7	53	0.45	6FAM
BM17132	2	19	58.6	10	4	66	0.63	6FAM
CSSM65	58	19	65.7	9	11	74	0.74	HEX
RM186	120	19	66.1	2	4	59	0.44	HEX
BMS1069	122	19	72.0	6	7	74	0.74	TET
RM388	120	19	85.9	7	4	67	0.64	6FAM
BMS601	31	19	99.5	8	5	67	0.72	6FAM
BM3517	13	20	0.0	10	7	73	0.69	TET
BM1225	4	20	8.0	11	9	69	0.64	6FAM
BMS1282	107	20	19.1	9	3	48	0.48	HEX
BMS2461	111	20	31.2	9	3	56	0.39	TET
BMS1128	5	20	33.9	8	3	45	0.36	6FAM
BMS2361	106	20	45.5	7	5	81	0.69	HEX
AGLA29	9	20	50.6	9	3	30	0.24	HEX
BM4107	21	20	52.4	10	7	78	0.69	HEX
ANP1	107	20	52.6	5	3	42	0.36	HEX
BM8115	128	21	0.0	12	6	80	0.77	HEX
BMS1117	1	21	9.9	9	5	80	0.63	HEX
RM151	111	21	11.7	13	1	0	0.00	HEX
ILSTS095	24	21	24.4	6	10	81	0.71	6FAM
BM103	29	21	30.5	10	5	36	0.35	TET
BMS2557	110	21	38.6	5	4	16	0.30	6FAM
BMS868	127	21	47.9	11	10	72	0.70	TET

TGLA337	112	21	56.3	12	4	38	0.41	6FAM
CSSM26	58	22	0.0	14	3	25	0.23	6FAM
BM1558	58	22	173	4	3	25	0.26	HEX
BMS742	4	22	18.0	6	2	15	0.13	HEX
INRA194	18	22	21.8	5	5	58	0.56	HEX
AGLA13	Single	22	29.4	8	5	72	0.67	6FAM
BMS2573	5	22	40.4	10	4	14	0.13	6FAM
BM3628	103	22	44.5	8	12	77	0.73	6FAM
BMS875	103	22	61.1	5	5	70	0.69	6FAM
BM4102	24	22	81.1	9	3	19	0.16	6FAM
BM47	23	23	9.1	17	3	53	0.44	6FAM
UWCA1	120	23	22.1	11	6	66	0.59	6FAM
BOLADRB2	126	23	33.3	3	1	0	0.00	HEX
BOLADRB1	126	23	35.4	10	7	83	0.79	TET
BMS468	35	23	36.0	4	3	41	0.37	TET
CYP21	103	23	36.0	11	3	23	0.19	HEX
PRL2	43	23	43.2	0	2	6	0.06	6FAM
RM185	19	23	45.1	8	2	9	0.09	HEX
BM7233	42	23	49.1	11	6	38	0.39	6FAM
BM1818	24	23	50.9	8	4	20	0.21	HEX
BMS2269	12	23	60.8	10	7	69	0.60	6FAM
BM1905	3	23	64.3	11	5	60	0.54	TET
BM1443	109	23	67.1	10	4	58	0.51	6FAM
BMS2526	108	24	6.0	11	3	44	0.39	HEX
BM7228	23	24	173	6	9	73	0.79	HEX
BMS2270	11	24	21.2	14	3	52	0.44	6FAM
ILSTS065	91	24	25.2	7	0	0	0.00	HEX
CSSM31	127	24	25.2	4	7	70	0.70	HEX
AGLA269	107	24	27.6	17	9	69	0.66	6FAM
BMS1862	1	24	32.8	10	9	86	0.84	HEX
BMS1743	17	24	40.7	17	6	70	0.63	6FAM
BMS3005	6	24	46.1	2	2	3	0.03	TET
BMS466	17	24	46.1	10	14	78	0.71	HEX
RM338	130	24	46.8	8	10	75	0.70	TET
INRA090	133	24	53.2	5	4	52	0.48	6FAM
BMS2034	133	24	57.4	4	12	81	0.75	6FAM
BMS1926	104	24	57.4	9	3	8	0.09	HEX
BMS3024	35	24	62.5	12	2	42	0.34	6FAM
ILSTS102	23	25	6.5	9	5	66	0.61	TET
BMS130	15	25	12.3	10	3	9	0.08	TET
BM4005	33	25	12.3	11	2	2	0.02	TET
RM404	103	25	15.2	7	6	65	0.70	6FAM
BM737	23	25	27.8	11	5	64	0.61	TET
BMS1353	20	25	45.3	15	5	67	0.65	HEX
AF5(L6038)	123	25	60.6	11	7	73	0.72	TET
BMS651	94	26	2.5	12	5	53	0.53	TET
HEL11	94	26	20.7	13	12	68	0.76	6FAM
BM1314	93	26	24.8	7	1	0	0.00	6FAM
BM188	30	26	40.4	11	8	73	0.67	HEX
BMS2567	103	26	50.0	8	2	9	0.11	HEX
BM804	112	26	59.6	8	4	58	0.52	HEX
BM3507	4	27	0.0	14	6	59	0.73	TET
BMS1001	32	27	5.1	9	6	56	0.55	TET
BMS2137	25	27	19.3	6	3	54	0.37	TET
CSSM43	18	27	34.1	9	4	58	0.57	HEX
CSSM36	5	27	39.8	7	1	0	0.00	HEX

INRA134	112	27	45.5	12	1	0	0.00	TET
BMS2116	104	27	55.4	9	6	47	0.54	6FAM
BMS1675	17	27	64.1	10	4	44	0.43	6FAM
BMC6020	105	28	2.5	18	9	69	0.72	TET
IDVGA29	34	28	8.7	7	9	80	0.71	HEX
BL25	28	28	17.8	6	2	2	0.02	6FAM
BMS510	2	28	22.1	13	4	75	0.69	HEX
BMS2608	107	28	32.0	9	3	9	0.09	6FAM
BM6466	122	28	35.8	14	3	16	0.14	6FAM
BMS1714	109	28	42.1	9	7	72	0.64	TET
BM4602	7	29	0.0	12	4	26	0.24	6FAM
BMS1857	20	29	0.9	15	9	89	0.79	6FAM
BMS1244	105	29	1.5	11	5	33	0.35	HEX
BMS764	Single	29	9.7	8	7	78	0.77	6FAM
BMS1787	56	29	18.5	15	7	75	0.67	TET
RM044	33	29	23.3	10	7	76	0.70	6FAM
BMS1600	105	29	28.4	6	5	72	0.57	HEX
OCAM	17	29	39.9	3	3	38	0.38	6FAM
RM040	103	29	39.9	5	2	14	0.12	HEX
BMC3224	52	29	43.6	4	2	2	0.02	HEX
BL1100	103	29	46.6	10	7	62	0.63	HEX
URB011	33	29	55.6	7	8	84	0.75	6FAM
BMS1948	107	29	61.6	12	2	38	0.27	HEX
BM6017	10	X	4.7	14	5	64	0.74	HEX
BMS903	5	X	12.1	13	6	83	0.69	HEX
INRA120	16	X	128.5	8	4	69	0.51	TET
XBM38	22	X	128.6	5	4	57	0.65	TET
MCM74	42	X	128.6	7	3	40	0.34	6FAM
BMS911	42	X	136.2	9	5	70	0.66	HEX

^a Taken from USDA/MARC database

^b ABI fluorescent label used with forward primer

Appendix B. Multiplex PCR conditions^a

1		2 (3)^b		3 (2)		4 (Pit1-6B6)	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	3.710	Water	4.500	Water	4.120	Water	2.400
10X	1.000	10X	1.000	10X	1.000	10X	1.000
MA ^c	1.000	MA	1.000	MA	1.000	MA	1.000
BMS1172	0.200	BM17132	0.125	BM4440	0.070	BMS941	0.200
BMS2639	0.120	BM2113	0.100	BM1905	0.070	BMS460	0.200
BMS410	0.175	BMS527	0.150	BM720	0.400	BM3507	0.400
RM372	0.150	BMS510	0.100	BM1706	0.125	BM4307	0.300
BMS1862	0.075		-		-	BM1225	0.200
BMS1117	0.150		-		-	BMS742	0.200
DNTP	0.500	dNTP	0.500	dNTP	0.500	dNTP	0.500
25mM Mg	1.200	25mM Mg	1.200	25mM Mg	1.200	25mM Mg	1.200
Taq	<u>0.100</u>	Taq	<u>0.100</u>	Taq	<u>0.100</u>	Taq	<u>0.150</u>
Total	10	Total	10	Total	10	Total	10
TP ^d -A		TP-A		TP-A		TP-A	
5		6		7		8	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.000	Water	1.400	Water	1.450	Water	4.650
10X	0.500	10X	0.500	10X	0.500	10X	1.000
MA	0.500	MA	0.500	MA	0.500	MA	1.000
BMS903	0.150	BMC1410	0.075	TGLA57	0.050	RM500	0.300
BMS1128	0.150	BMS3005	0.150	BM4602	0.100	TGLA227	0.300
BMS2573	0.075	BM9248	0.125	BMS585	0.075		-
BMS1116	0.050	BMS2614	0.100	CSSM46	0.200		-
BMS555	0.100		-		-		-
CSSM36	0.050		-		-		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.500
25mM Mg	0.750	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.800
Taq	<u>0.100</u>	Taq	<u>0.100</u>	Taq	<u>0.100</u>	Taq	<u>0.100</u>
Total	5	Total	5	Total	5	Total	10
TP-B		TP-A		TP-A		TP-A	
9		10		11		12	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	0.950	Water	1.910	Water	0.640	Water	3.550
10X	0.500	10X	0.500	10X	0.500	10X	1.000
MA	0.500	MA	0.250	MA	0.250	MA	1.000
BM4513	0.050	BMS2533	0.120	BMS2270	0.075	BMS360	0.200
BMS947	0.200	BM4311	0.075	BMS2142	0.100	BMS2258	0.150
AGLA29	0.200	BM6017	0.150	BMS434	0.130	BMS2269	0.100
TGLA49	0.100		-	BMS4008	0.200	BMS1979	0.250
BM6438	0.125		-	BMS1716	0.150	BM1824	0.250
	-		-	BM6507	0.075		-
	-		-	BMS2809	0.150		-
	-		-	HUJ246	0.075		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.500

25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.650	25mM Mg	1.200
Taq	<u>0.100</u>	Taq	<u>0.050</u>	Taq	<u>0.050</u>	Taq	<u>0.100</u>
Total	5	Total	5	Total	5	Total	10
TP-A		TP-A		TP-A		TP-C	

13 (15)		14		15 (13)		16	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	3.850	Water	1.250	Water	2.950	Water	1.200
10X	1.000	10X	0.500	10X	1.000	10X	0.500
DMSO	1.000	MA	0.250	MA	1.000	MA	0.500
BM2934	0.300	IL4	0.125	BMS419	0.300	BMS4040	0.075
BMS827	0.150	BMS614	0.080	BMS130	0.300	BMS2684	0.075
BM3517	0.150	BMS2047	0.080	BM7169	0.250	BMS2213	0.075
BM8124	0.200	BMS4031	0.280	BMC701	0.400	BMC1009	0.075
-	-	BMS820	0.125	-	-	BMS2349	0.150
-	-	BMS1967	0.035	-	-	INRA120	0.125
dNTP	0.500	dNTP	0.250	dNTP	0.500	dNTP	0.250
25mM Mg	1.200	25mM Mg	0.500	25mM Mg	1.200	25mM Mg	0.600
Taq	<u>0.100</u>	Taq	<u>0.050</u>	Taq	<u>0.100</u>	Taq	<u>0.050</u>
Total	10	Total	5	Total	10	Total	5
TP-C		TP-A		TP-C		TP-B	

17		18		19		20	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	0.625	Water	0.245	Water	1.045	Water	1.010
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BMS1675	0.075	BM4028	0.220	BMS1095	0.080	BM2078	0.125
BMS466	0.100	BMS528	0.050	BMS2055	0.200	BMS1004	0.220
BM121	0.150	BMS610	0.110	ILSTS008	0.100	BMS1857	0.200
BMS1743	0.100	BMS574	0.100	SPS113	0.050	BMS1353	0.125
BM757	0.100	INRA194	0.230	RM185	0.200	-	-
CSSM22	0.175	ILSTS035	0.11	BMC4214	0.060	-	-
OCAM	0.150	CSSM43	0.22	-	-	-	-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.500	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.050</u>
Total	5	Total	5	Total	5	Total	5
TP-B		TP-A		TP-A		TP-A	

21		22		23		24 (25)	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	0.305	Water	1.065	Water	1.085	Water	0.595
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BM7145	0.130	BM2607	0.090	BM47	0.100	BMS2172	0.200
BMS2295	0.130	CSSM42	0.150	BM7228	0.200	BM4102	0.090
BMS803	0.060	BMS1315	0.090	ILSTS102	0.050	BMS2072	0.300
BMS2321	0.200	ETH121	0.200	BM1862	0.120	ILSTS095	0.150
BMS2	0.150	XBM38	0.100	BM737	0.150	BM1818	0.175

BM4107	0.090	-	-	-	-	-	-
CSN3	0.300	-	-	-	-	-	-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.500	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.500
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-B		TP-B	

25 (24)		26 (27)		27 (26)		28 (29, 30)	
DNA	0.750	DNA	0.075	DNA	0.750	DNA	0.750
Water	1.275	Water	1.595	Water	2.005	Water	1.945
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BMS1322	0.100	BM3509	0.140	BL1103	0.070	INRA006	0.100
BMS2137	0.100	INRA037	0.100	INRA133	0.050	BL25	0.090
AGLA232	0.075	BMS1724	0.050	HUJII77	0.040		-
IDVGA52	0.300	BMS 2460	0.075		-		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.500	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-B		TP-A		TP-A		TP-A	

29 (28,30)		30 (28,29)		31 (BMS648)		32	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.925	Water	1.565	Water	1.345	Water	1.635
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
ILSTS036	0.100	BM188	0.200	BMS2508	0.100	BM4129	0.075
BM103	0.050	BMS47	0.080	TEXAN2	0.150	BMS975	0.120
BP2	0.050	BL1036	0.100	BMS1355	0.080	BMS1001	0.075
	-		-	INRA003	0.080	RM150	0.075
	-		-	BMS601	0.080		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-A		TP-A	

33 (50)		34		35 (36)		36 (35)	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.215	Water	1.385	Water	1.505	Water	1.675
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
RM044	0.180	IDVGA29	0.130	RM326	0.100	BMS1747	0.075
URB011	0.120	BMS2571	0.040	BMS468	0.175	BMS4037	0.250
BM4005	0.175	BMS2024	0.250	BMS3024	0.075		-
BMS2904	0.080	BM4621	0.050	BM711	0.060		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600

Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-D		TP-D	

38		40		42		43	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.375	Water	1.665	Water	1.525	Water	1.575
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BM1329	0.080	BM1853*	0.090	MCM74	0.100	PRL2	0.125
BM1223	0.080	BMS745*	0.070	BM7233	0.100	BMS4023	0.100
BMS4015	0.150	BM723	0.070	BM6506	0.080	BM6444	0.080
BMS1788	0.075	BMS963*	0.100	BMS1074	0.090	TCRB	0.070
ILSTS045	0.090	-	-	BMS911	0.080	-	-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.500	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-A		TP-A	

44		45		46		47	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.685	Water	1.945	Water	1.805	Water	1.345
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BMS4028	0.080	BMS599	0.080	BM7225	0.080	RM041	0.100
BM8139	0.120	BMS1789*	0.060	CSSM54	0.060	INRA072	0.120
MILSTS080	0.120	BM864	0.100	BMS896	0.050	RM065	0.100
-	-	-	-	BM2808	0.070	BMS1840	0.080
-	-	-	-	-	-	BMS1237	0.090
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.500	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-B		TP-B	

48 (49)		49 (48)		50 (33)		51 (52)	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.885	Water	1.325	Water	1.865	Water	1.525
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
RM3	0.180	ARO28	0.200	BMS2145	0.040	BM6438.29	0.200
TGLA44	0.040	INRA040	0.300	URB042	0.190	IGF1	0.200
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-B		TP-E		TP-B		TP-A	

52 (51)		55		56		57	
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DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.765	Water	1.815	Water	1.745	Water	1.985
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BMS353	0.085	RM088	0.090	BMS2076*	0.080	ILSTS030	0.090
BMC3224	0.045	BMS2319	0.050	BMS650*	0.080	ILSTS050	0.080
TGLA53	0.150	RM094	0.070	BMS1787*	0.060		-
	-	BMC4203	0.045	CSSM34	0.070		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-B		TP-F		TP-F		TP-B	

58**91 (INRA117)****92****93**

DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.625	Water	2.025	Water	1.825	Water	1.505
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BM1558	0.100	RM103	0.100	BMS4017	0.150	INRA119	0.130
ETH225*	0.090	ILSTS065	0.1	BM9146	0.075	BM1314	0.130
CSSM26	0.060		-	BMS4019	0.075	AGLA17	0.150
CSSM65	0.100		-		-		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.500	25mM Mg	0.500	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-F		TP-E		TP-A		TP-A	

94**100****101****102**

DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.725	Water	0.930	Water	0.180	Water	1.040
10X	0.500	10X	0.625	10X	0.625	10X	0.625
MA	0.500	MA	0.500	MA	0.500	MA	0.500
HELL11	0.200	BMS2252	0.100	RM096	0.060	RM327	0.080
BMS651	0.100	INRA122	0.200	BM7109	0.110	BM1233	0.080
	-	BM3412	0.075	INRA071	0.100	ADCY2	0.170
	-	BL37	0.200	BM875	0.250	BMS1352*	0.070
	-	BMS2724	0.060	IDVGA3	0.110	BMC1207*	0.070
	-		-	BRN	0.220	BM4006	0.110
	-		-	BMS2325*	0.090		-
	-		-	BM9065*	0.070		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-E		TP-A		TP-A		TP-A	

103**104****105****106**

DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
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Water	0.640	Water	1.385	Water	0.410	Water	1.305
10X	0.625	10X	0.500	10X	0.625	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BMS875	0.070	BMS2116	0.110	BM6105	0.050	HEL1	0.150
RM404*	0.080	HUJ616	0.100	BMS1248	0.070	BMS678	0.060
BMS1316	0.100	ETH152	0.100	BMS1244	0.240	BMS2361	0.080
BM3628	0.100	BMS1926	0.060	BMS1600	0.220	BMS518	0.100
BL1100	0.070	BMS429*	0.100	BMS2847	0.085	BMS2057	0.050
RM040	0.090	-	-	BMS2377*	0.050	BM7160	0.070
BMS2567	0.150	-	-	BMC6020*	0.060	-	-
CYP21	0.120	-	-	INRA048	0.120	-	-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-A		TP-A	

107		108		109		110	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	0.740	Water	1.240	Water	0.920	Water	1.725
10X	0.625	10X	0.625	10X	0.625	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BL1043	0.050	BMS817	0.150	BM9202	0.090	BMS2557	0.120
BMS2608	0.050	BM49	0.090	BM1443	0.120	BMS1348	0.080
AGLA269	0.220	BMS2526	0.090	BL1071	0.220	BMS713	0.100
BMS1948	0.100	BMS812*	0.050	BMS2742	0.060	-	-
BMS1282	0.060	IDVGA49	0.100	RM66	0.090	-	-
ANP1	0.120	-	-	BMS1714*	0.060	-	-
BMS108*	0.080	-	-	-	-	-	-
BM2504	0.050	-	-	-	-	-	-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-A		TP-A	

111		112		113		114	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.200	Water	1.280	Water	1.605	Water	1.700
10X	0.625	10X	0.625	10X	0.500	10X	0.625
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BMS1658	0.200	TGLA337	0.090	BM4117	0.090	JAB8	0.050
RM151	0.050	BM8125	0.090	BMS356	0.070	OARVH998	0.200
BM4208	0.050	BM804	0.080	BMS2267	0.050	-	-
BMS2461	0.200	INRA134	0.050	BMS2519	0.150	-	-
-	-	BM6026	0.150	-	-	-	-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-A		TP-A	

120		122		123 (124)		124 (123)	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.585	Water	1.680	Water	1.960	Water	1.700
10X	0.500	10X	0.625	10X	0.625	10X	0.625
MA	0.500	MA	0.500	MA	0.500	MA	0.500
UWCA1	0.100	RM011	0.090	AF5(L6038)	0.060	BMC1222	0.130
BM9067	0.110	BMS1069	0.040	BMS1864	0.060	BM8118	0.120
RM186	0.070	BM6466	0.050		-		-
RM388	0.090	BL1029	0.080		-		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-G		TP-A		TP-A		TP-A	

126		127		128		130	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.285	Water	1.505	Water	1.545	Water	1.705
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BOLADRB1	0.150	BM305	0.090	BMS1167	0.090	BMS1825	0.090
LEP	0.180	ILSTS018	0.100	BM4325	0.200	RM338	0.100
PTH	0.100	BMS868	0.120	BM8115	0.100	INRA5	0.120
BOLADRB2	0.090	CSSM31	0.100		-		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-E		TP-A		TP-A		TP-A	

131		132		133		AGLA13 (BR6504)	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.675	Water	1.645	Water	1.725	Water	2.125
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BMS690	0.100	BM2830	0.090	INRA090	0.250	AGLA13	0.100
BMS1242	0.075	BR2936	0.250	BMS2034	0.050		-
BMS382	0.150		-		-		-
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-E		TP-A		TP-A		TP-A	

BMS1318		BMS648 (40)		BMS764		BR6504 (AGLA13)	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	2.125	Water	2.165	Water	1.925	Water	1.925

10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
BMS1318	0.100	BM648	0.080	BMS764	0.200	BR6504	0.200
dNTP	0.250	dNTP	0.250	dNTP	0.250	dNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-A		TP-A		TP-E		TP-A	

Inra117 (91)		Pit1-7B7 (7)		Pit1-6B6 (4)		OARFCB11	
DNA	0.750	DNA	0.750	DNA	0.750	DNA	0.750
Water	1.925	Water	2.125	Water	2.125	Water	2.125
10X	0.500	10X	0.500	10X	0.500	10X	0.500
MA	0.500	MA	0.500	MA	0.500	MA	0.500
Inra117	0.200	Pit17b7	0.100	Pit17b7	0.100	OARFCB11	0.100
dNTP	0.250	dNTP	0.250	dNTP	0.250	DNTP	0.250
25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600	25mM Mg	0.600
Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>	Taq	<u>0.075</u>
Total	5	Total	5	Total	5	Total	5
TP-E		TP-E		TP-E		TP-E	

- ^a All units are microliters (μl) and all working primer concentrations are 20 μM except those noted which are 10 μM.
- ^b Multiplexes or individual markers in parentheses can be co-loaded.
- ^c Master Amp PCR enhancer.
- ^d Thermal profiles listed in Appendix C.

*

Appendix C. Multiplex PCR thermal profiles

A

Temperature	Time (min)	
96°	3:00	
96°	0:30	4 cycles -1.0°/cycle
58°	0:30	
65°	1:00	
95°	0:30	30 cycles
54°	0:30	
65°	1:00	
65°	20:00	

B

Temperature	Time (min)	
96°	3:00	
96°	0:30	3 cycles -1.0°/cycle
58°	0:30	
65°	1:0	
95°	0:30	30 cycles
56°	0:30	
65°	1:0	
65°	20:00	

C

96°	3:00	
96°	0:30	3 cycles -1.0°/cycle
58°	0:30	
65°	1:00	
95°	0:30	30 cycles
55°	0:30	
65°	1:00	
65°	20:00	

D

96	3:00	
96°	0:30	3 cycles -1°/cycle
56°	0:30	
65°	1:0	
96°	0:30	35 cycles
53°	0:30	
65°	1:0	
65°	20:00	

E

96°	3:00	
96°	0:30	3 cycles -1°/cycle
54°	0:30	
65°	1:00	
96°	0:30	35 cycles
51°	0:30	
65°	1:00	
65°	20:00	

F

96°	3:00	
96°	0:30	4 cycles -1°/cycle
62°	0:30	
65°	1:0	
96°	0:30	35 cycles
51°	0:30	
65°	1:0	
65°	20:00	

G

96°	3:00	
96°	0:30	4 cycles -1°/cycle
50°	0:30	
65°	1:00	
96°	0:30	30 cycles
46°	0:30	
65°	1:00	
65°	20:00	

