

Supplementary Table S2: Details of KASP Markers used in present study.

SNP_ID	LG	P (cM)	Alle	Allel	Dataset	Sequence
BARC-059889-16199	1	7.349	T	C	GCP/IBP	ctaatttgtaRtacatggaagggaTCTAGTMCTCGAATT TATAAGCATCGTACAAGAATG[T/C]TGAGATAAG AAATATATGAAATGGAATAACAAAAAGTATAGA CATGAAATAAGAGAATGC
BARC-016475-02622	1	18.589	T	G	GCP/IBP	GAAGCTTGCTCAACTCTTCGTCGTTCTCACC GCC AATTGGATGTGGCGTGGAACAATTC[T/G]AGTCT TCTTGTTATCTCTCGCAGCGTTTCCAGCCAATTCC AAAACCTAAAACAATGTTCC
BARC-060833-16926	1	37.143	A	G	GCP/IBP	GTGCGCCCTCTCCGAACAYCTTCCCTCTTCTCCAT GGCAGTGAATGAAGAACACTGTAGG[A/G]TAAG AGATCTCGATGGCGAGAAAGGGAAAAGGTTTGC GGTGATTCCGTGAAGTGTAGCAT
BARC-059281-15709	1	40.869	A	G	GCP/IBP	CTTTCTATAAARAAAATGGATGGTGATTGAGATT GATTACCACGAGATAAATAATGCAYG[A/G]CGCT AGCACAGTGATGGAACGACCTAACTAAGCATCA GCCAA
BARC-065083-19095	1	45.576	A	G	GCP/IBP	GGAAAGAACATGTTGAAKTATAAGGATCCTTTCT ATGAATGTTAGAGGTCTGGGCAATCA[A/G]GTA AAGTGTAGAGCAATTAGAGACTCGATTGCCAAA GAGAGGGTACAACACTACTATGCTTA
BARC-024909-10358	1	54.864	A	C	GCP/IBP	AAATAATCCTCGCACTAGAGACATTACTATACAA TTACTATTAAAACTAGTTTTTCATGA[A/C]AAATG CAAAAAATGCTTAAGTGGTGTAGAAAATTGTCA ACCTGACATctggaTGT
BARC-013211-00449	1	77.066	A	G	GCP/IBP	TTTCTGGGACTTTGGATTGTCGATAAGTTGAACA CACACGTATACATGTATTTAGTG[A/G]GATCAAA GTAAACTTAAATGATCATACTTATCCTGTTGGATC TGAAACAGATTGAAAAGC
BARC-018211-03157	1	97.287	T	C	GCP/IBP	AGACCAAGACTCCTCACTCAATTTAACAAATCAT TGCACTCTTTAAAAATGCAAAACAAT[T/C]GATA CAATTATCCAATAACAAAACACAAGGCTTYCATA CCTCATTAGTCATGAAATAACT
BARC-029431-06192	2	19.781	A	G	GCP/IBP	TTGACTGCAAAATCTTGACAAGGGTTGGATCAG AAATATCATGGCTAACCTTTTCGTAC[A/G]CAGC ACTCCACTTCACCTCGCATCCATCGCCAATTGGA GTCACTGAAATGTCTCCCTTGA
BARC-020481-04638	2	25.115	A	T	GCP/IBP	GTGTGTGGATATAAATATTTTACACTCTTCTCAG ACGCTAGATTCTGTATTTGGATGAAA[A/T]TTTCT TACTGAGGATTCTCTTAATATAATGTAAAATGTT ACTCTCTAGAATTTATAGAAG

BARC-051039-10958	2	32.397	A	G	GCP/IBP	TCATTGCAAATTTCTGTCCACAAGGCTTGTTGCTT AGGTGGTGGTGAGGGTGATTGGGTT[A/G]TTCA GATTCAGGTCATTAATGTTTGGGTTATGCACTTA AATCACTTTTTAAAGAAATAGA
BARC-063497-18380	2	44.461	A	G	GCP/IBP	ATCATAAGGATCCTGTTGGTGTTTCATGATAAGGA AGCTATGATGATTGATAGTGGACCGG[A/G]TAA TCCTCAATAGGCCTTGGCCTCAATGATAAAGCTT GATGATGCAAGGGATGAGGTGGT
BARC-048815-10726	2	66.176	T	C	GCP/IBP	TTATGATTTTTGATATTTTTGTGTTCATGTAATGG TGTATAACTGTTGTACATGTGGGGG[T/C]TATAT GGTTATTGCTTCTACCAATGATG
BARC-042403-08252	2	81.581	T	C	GCP/IBP	GTATTGGGCAATCACCAAAAAAGTTTGGTGTGC ATACCCAAAGATTTTAAGTCCTTACAG[T/C]AATC TCATCAACGAGGATGAGGATGCACAACTACTT GAAATTTGTGCAGAATGAGATGT
BARC-030195-06829	2	85.835	A	C	GCP/IBP	ATGTTTATGCTGTTGGTAATCCCTTGAGATCCAA TGCCACTGTCCTTTATACCCTGTCAG[A/C]ACAGT ATTTGTTAATAATAGATTGGTGATATAGAAAAAA AATGTTTTTTTTTAGTTCGAA
BARC-041581-08046	2	101.181	C	G	GCP/IBP	ACACGGAAAATTATCATATCTATAAAG[C/G]GTA AGAAGGGAAGACAGAAAATTAAACAGAGAAA agGAGCATAGGCGCGATTTCAAACC
BARC-046084-10230	2	105.034	C	G	GCP/IBP	TTTTCTAGGGGAAAGATAAAGTGTCTCCTCTAAT CTAATGGGTCATGAATTAATCTTGCA[C/G]TG TG TGGTGAACCCAACAAAATTTTACGcataattttttatt aaataaattattccaat
BARC-016037-02043	2	119.19	A	G	GCP/IBP	CGTTTGCTTTGCATTGCTGTCTGTSTASATCTTT AATTATTTGGAGAGAGGAAAGA[A/G]TTCT ACTCCACATGTTCCCTGTCCCCTTCTGGATCCTTC CTTCTTTCTGTATACTTTT
BARC-052165-11373	3	12.532	A	T	GCP/IBP	TTCAAAATTTTCCCCGAAATATCAGCATGAACTT GTGTTGTTTATTCTCTCTAAAAAAA[A/T]TTGTG TTGTTTACATCTTACTCTGGCAAGTGAGTGGCAA CATATAYACATGAAGAGGTTG
BARC-048383-10556	3	32.618	T	G	GCP/IBP	TTGCCAGTTAGCAGGGCCCTCAGGGAACCACAA TGCAATTTCTTGTTAGCACTTTCAAC[T/G]GCAT CACTTCCATGGATAACATTCTACACAAAGACAA GTTCAATAAACAAAATTCAAAG
BARC-063255-18278	3	37.468	A	C	GCP/IBP	GATCCATTGAAATCCAAAAGTGGAGGAGCCAAT GCTCATGAAGAGAAGCAGTAATTCCAG[A/C]TG GTTCTTTGAAGGTAACATTTTGATGTTGGTTTG ATCTTTATGTACACATAAAATTAC

BARC-050433-09624	3	44.989	T	C	GCP/IBP	AATTAGAAATCATAAGTTAGAACTATATTCAGTT AGGGAAGGGGGTAAACAGTTTACAAA[T/C]AGC AGAAAATGTTATCCAAAAATACTGTGTACTTCAC TACTTTATATGGTCATACTTAGT
BARC-010179-00543	3	49.693	A	T	GCP/IBP	GAATAAAGGTCCAARGTGAATTACTCTATTTAGC TTCATGAAACATGTCAGATGACAACA[A/T]TTCA AGTAATGTGATCAGAAAATGAAAAAGTGTATAT AGCTTGATGATAATCTGTGTAAT
BARC-023365-05350	3	60.667	A	G	GCP/IBP	AAAGTTGAAGGATTA ACTATATACCATGTAAAA GCCACCTACAGGTATAAACAATTTGC[A/G]TTGT CTTCTTAGGTTTGTTCCTTGCGTGCTTTTGATGA AATATGCTGCTCCATGAAATG
BARC-047693-10381	3	67.505	A	T	GCP/IBP	CAACACTTTCAACACATGGAAAGAGCAACATCAG CATGATGAGAACAAACCCGGTGTGAT[A/T]GGG TCCATGTTTAGAGCCGCCAAGGAAGCCGTGGTT GGGAAGCCTCACCACGAGGAAGTT
BARC-028539-05944	3	74.162	T	G	GCP/IBP	CAAGCATTTTCATGCAATGCATGCATTAACAAAAT TTTCTTTGAAAGGTTGTTTTTGCTC[T/G]GGTAT TGAAAATTTTCCATTGTCAGGCATGTTGATCTTGT TAACTAAATAAGCTATGGG
BARC-044603-08734	3	85.822	A	T	GCP/IBP	ACACTAATTATGGTAAAAAGGAAAAAAAAAATAA TCTCATGGATAGGGATTACGATTTTCT[A/T]CAAT TAATTATTTGAACACGGAAGTCTGAAGCTGTGTT CTGGCTAAATAATTGTGGTTAG
BARC-028321-05831	4	4.856	T	C	GCP/IBP	ATCCACGCCATTGTTGTTGAACACCGCACGGTCC AATGCAAGCGTGCAAGCTTCTTGCCC[T/C]AAGC ATTCTCGCTCCACGATTTGCTTGCTGGCAGCAGC ATTGCAGCTTCCCATTGCAAAG
BARC-057913-15004	4	10.044	T	G	GCP/IBP	ATATAATCTTATAGGCTCTTAGCGAGGTATTACA CTTTGGATAATTTGTAAAAATTAAT[T/G]GATG ACATCATCGAAGAAGAAAAATTGTTTGTATGAAT TTGTTTAAATTGTATTTTAATT
BARC-022353-04316	4	16.715	A	T	GCP/IBP	TAACGTGGCAGGATCAGTTACTGAAGAAGACGC GGTTTCCGCAAGGTGGTTAGAGGGAGC[A/T]AC CGTCACGCTCACGCTTCTTGCAAGAATAATGGGT AAACCCGAATCGCTCAAATCGGAT
BARC-031733-07217	4	19.496	A	C	GCP/IBP	TTTAGCAGATGCAGTAATAGAAGCTCTCCCATCA GCAACAGCAATATATGCACCGACCAG[A/C]ACCT CTGAAGATGTTGATCATGACCCAGTTAGATATTT TATCAAGATGTTCTTTGGTTCA
BARC-044691-08761	4	32.272	T	C	GCP/IBP	CATAGAGGTTATACGGAACCTTGCAATCCTAAAG TAACTGATATCATGGGATTTAGTTTC[T/C]CCATG GACAGCAAGGTCCGTCAATATCCTGCCAATAACC GGAGCCATCTTGAAGCCGTGA

BARC-030073-06798	4	44.632	A	G	GCP/IBP	CACACTACTCCAGCCATTCCCTGAATCACCAAAA AGATATTCAGAGAAGTCATCTGTGCT[A/G]GTTG AATCACGGGTGCTATCTGTACTACAAGAACCTTC ATCGGAGTTGCTGCTGATAAG
BARC-053219-11764	4	48.874	T	C	GCP/IBP	ACTCCAATGTTTGAAATCTCTTCGTCTACATGATC ATAGTCAACATTAACATTACCATTG[T/C]ATGTAT CTCGTTCGTCTTCAATAATCATGTTATACAATATA ATGCATGCCAATATAATAT
BARC-016757-03361	4	51.445	A	G	GCP/IBP	TTCATCTGTCTAAAATGTTGTTTTTGACAAGCAAA GTAGGTGACACTCTTGTAAGCATCA[A/G]CAATT AACACTTCTGGGGAAAAGTGTGAAACAGATGAT TGTTTATGCTAATAATTAAAAA
BARC-044523-08716	4	63.901	A	C	GCP/IBP	GTTCTTCTACAACCGTGAAGATGGATTATTGACT ATTACACTTGCTGGTGAAGGCAACTC[A/C]AAGG ACATAGAATTTGTATACTGAGGTGAAGTCAAAGT GAGTCTATTCCGATTCTTCTTC
BARC-042189-08197	4	68.847	T	C	GCP/IBP	AACACAAGTAATGCCCACTTTAGTCCATGAAATT TAAGTTTAGTCTCTAGTTTTACCAAA[T/C]TCTCC CTTGAGTCCCTATTTTAGATTTTTATAACACTAAG AATTGAGATTCAAGAGAGAR
BARC-013699-01240	4	97.433	T	C	GCP/IBP	TAGCTTGGCCACAAAGGGTGTGGTTCACATCGAT GTGATCATGTTGGCTCACAATCCAGG[T/C]GGGA AAGAGAGAACAGAGAAAGAGTTTGAGGCTCTG GCCAAAGGCTCTGGATTCCAAGGT
BARC-061009-17004	4	104.605	C	G	GCP/IBP	AAGGTATATTCCCATGTTTATACTATTTTATTCTC ATGCTAAAGTCAGAAAGTTACGTTC[C/G]GATGA AAAAGTGGAATTTATTTTCTAACCCACCAACTT CCATTTTTTTTATCTTAAAC
BARC-048987-10780	5	0	A	G	GCP/IBP	AATCAATCTTGAAACCGAGTGCTGCTCCATGTAT TCGGACATATCAATTCTCACCAACTG[A/G]TTTTC ATTATCAAATAGTTGCTCAGCAAGAGCCTTTGCA AGCTCAGTTTTACCAACACCA
BARC-019415-03923	5	17.645	A	T	GCP/IBP	TCATCTTTAATAACATTA AAAAGCAAGATGAACT TCTTGAAATGACATACTAAATTTACA[A/T]GTTTT TTAAAGTTTAAGGAACAAATTCAGTGATACAAAA ACAGAGGGACcaaatttataa
BARC-040459-07745	5	36.095	T	C	GCP/IBP	GTTCTCTTGACATCAACAAAGCCATTCCAGAA GCAGCCATTTTTGGAAGCTCCAACCA[T/C]AGAA TGATCACAGGTATAAAGACGTCTTTCAGAAACT ACAAACTATTTGCTTGATAAGA
BARC-042853-08438	5	49.474	A	C	GCP/IBP	GtGTTGAAACGGAACCGAAATTGATCGTATTTCA CTG[A/C]GTGGAAGGAGCGAAATTGAGAAGCTG CTTGGAACGAAGCCACGGCTTCACCACCACAAC G

BARC-059081-15595	5	55.158	T	C	GCP/IBP	TTGATCTCCATAAAATATATTATTGGATGTTGGA ACAATTTTTATTGGTCGGATTTAAAC[T/C]TAAAG ATTGTTGGTGCAAATTGGTGATGATGGTTCTACA ACAATGAAGAAATACCAAAGA
BARC-047849-10410	5	65.734	A	T	GCP/IBP	CACACACAGAGTATAACTGTYAATAATCAGTAAC TGTAATCAAACCACTCCAAGGCCTAT[A/T]TCTTC CAATTTTGAAACATAAACCAACTACAATCAGATA GTCAAACCTATACGACACCAG
BARC-041257-07953	5	78.846	T	C	GCP/IBP	TTCATAAGCGAATCAATTTGCCAGTTTCAAGTAA GAAAATTATACTAGTCCCCTTGATTT[T/C]TCCAC CCGTAACCACTATCAGTATGGATGCGGCATTGAAT ATTTGATTATTTAGATAATA
BARC-015973-02029	6	6.108	A	C	GCP/IBP	TTTTTTGTCATAAACATGACCAGGTAAGCATGC TCTAATATCACTTCTTCCAACAGTTC[A/C]GCAAC CTTGTTTCTGTATTTAGGAAATAATTCATCAATTA TTCCTTCTCAAACCGTGCC
BARC-064413-18929	6	23.207	A	G	GCP/IBP	aaatattttatgatattttgaattttaatGGATTAATATCAT AAGAATGTAAAGAAATT[A/G]AAAAGTTTTTATA GGCACATGGTGTGTGT
BARC-059985-16274	6	34.398	A	T	GCP/IBP	GACAATAAATTTAAAGCATATATCACTTTCTTGCA AATTCTTCTTTTAAAATTACGTTTT[A/T]AAGATC GAATTTATCTAAAATTCTATTTGTAGATCTTAATC TAACCCTATCTTGTCTAAT
BARC-040587-07787	6	65.67	A	T	GCP/IBP	ATCTTTCCACTGATGTTTATAAATTTTTCAACCCT ATTAAGATCCTAGGGTTATATCTAA[A/T]GTAATT CCTCAATGCTGTAGATCTTTCAAAGCTTYAAACA ACTATTACATAGTGATAGAT
BARC-024429-04882	6	70.92	T	G	GCP/IBP	ACAACTTTTGTGGATTTACATCAAATATTTAATG ATTCTCTATTCTAATTTTGATTTT[T/G]CAATAAA CTTTAATCAATTACAGAAAATGTATTTGTAGCACT GCTAACATTGCATGTTAT
BARC-044133-08626	6	93.678	T	C	GCP/IBP	AACTGAAACGGATCGGACCAAGATGCTTGATTC CCCAGGAGGAGTTGTTGGATCTTGAG[T/C]AAA ACCAACAAAGACCCTTTTCACTCCAACCAAAAAA GCAACTAGGGTTCACTCATAAGC
BARC-066175-19800	6	100.913	A	G	GCP/IBP	AAAGTCAAATGTGTCCCTCCAAAAGTATAGATTA AAGTAAGATATTAAGTTGAAATTGTA[A/G]ACAA ACAAATATTAGGTTGAAATTTTACTACCAAGTAT AATTTAAATGAAGCCTTACAA
BARC-040475-07751	6	103.193	T	C	GCP/IBP	TGTCCAAGGCCATGACCCAGAAATCAAGAAGC ATGCATGTGACAAGAAAGACGGTGTTT[T/C]GTA TCATTATGATCCCACAGCTTGCGCCGAAGGAGAT GATTATAACGGGAATATAAATTA

BARC-059303-15722	6	106.362	A	G	GCP/IBP	TTCTTTTTAGTATTATATGTTGGGTGATTACTGTG AATACTGGTTAAATCTGCCATAATA[A/G]AACGA AACAGTTATCTAATTTCCAATGAGAGATATTTTA ATGAGAATGTGACACTATCTA
BARC-038885-07387	6	114.129	A	C	GCP/IBP	CAAATCTTTCTCACAACCTACAAGTTATCTTCTTT GAATAGTAACACTTTTGGGGAGCCG[A/C]CACAA AAGCCTAAGCTGAAGCTGAAGAAGGTTGCTGTT AAGGTTAAGAAGATTGTGGCCT
BARC-041427-07981	6	130.272	A	G	GCP/IBP	GGACGAAGAACTTTGTTTGTTCCTACAATATTA GTAGTTCTACTGAACTAGTCGACTCA[A/G]GTAG GATAGTCTCTTTAATGACCAGGTGTGGCCTATC CAAAAAAATTGTTAATTTGCA
BARC-029825-06442	7	16.947	T	C	GCP/IBP	CTTTTGTACTGCCATTGGGAAAATGGAGAAGGA ATCAAGGCACGTATTCTCCAACAGTGC[T/C]TTTT ATTAACAAGTTTCTATACGCTGATGTCAGGTGCA ATCTAGGTTTGAGGTTGACATA
BARC-900461-00929	7	39.074	A	T	GCP/IBP	TTGAAAACGTGTTGTTTGAAAGGGAGAGAAAATA CAAGAAAGGAATGTGACTACCAATGTC[A/T]ACT GAGTTAATAGAGCTGAATCTATTGCTTGAGTAGT CCAAGTAAATGGCATTTTTCAAA
BARC-044841-08824	7	45.128	A	T	GCP/IBP	ACCCCTGCCAAAAAATTGATTGAAATGAGACAC AAGCTAAAAAACAGGGCTGACATATA[A/T]AGC ATGCAAACGTTCAAAAGTCAAAACACAAACGCT GGAGGAAACTGCAAGTACATGGG
BARC-016783-02329	7	50.249	A	T	GCP/IBP	TCCATTTTCTGCGCAGTTCCACCATCACCAGC CGACGCTGCAGTTCCAGCAGCAGCC[A/T]CAGCC GCCACAGCTATTCCAGCATCAGGCACAGCCACCT TCCCACCAACAGTTTCATCCT
BARC-047995-10452	7	68.69	A	G	GCP/IBP	ATCGTTGGAGGCTCTGCAGTTTCTTGAGAATGAA CTACA[A/G]GACAAAAGGTTCTTTGGAGGAGAT GAATTTGGATTTGTAGATATTGCTGGTGTCTTCA TT
BARC-907715-01049	7	73.448	T	C	GCP/IBP	AAGTATAAATTTACTTTCTTTGTAAAGTAATAATT GTAGATCGTAGTGCTATATTAATAT[T/C]AATAG GGAGGGAAATAAGGATCTAGCTCTCCTCTATAAC AACTCACTGAACTAACTAGT
BARC-007320-00155	7	89.837	A	G	GCP/IBP	AGGACAAATATTGAAAGGTGATGATGCCAAAGT TAGCATGGAAGAGAGAGCTGGCCTCAC[A/G]GT TCCAAGGGCACATAGTCTCGTTTGTGTTCCAATT GCAAGGATCGGCGTTGCATCTAAA
BARC-065255-19294	7	98.539	T	C	GCP/IBP	AACAATGTAAAATATGAATTTGTGTAACATAYGA TTATAGCATTACCATTTCAGGGTAAA[T/C]TTCAA TTATGTATGTACGACTCCTTAATTCATTACAAAC TAAAGTTCCACCATCTTTCA

BARC-021937-04237	8	9.566	T	C	GCP/IBP	TGGGATCCACTCCTAATAGAGCTGGTGCATTTATTCGATATTATGCTTGACATTCCATGC[T/C]ATGGCAATATTTGGGATATGGGATCCACTCCTATGTTGTACATGATTGGTTTTTGTCT
BARC-017665-03101	8	30.669	T	C	GCP/IBP	CCGGTTCGACCGGGATCCGTGCCGGTTCCTATGCAACCCCTTATCACTACGTTCAACAA[T/C]CGTATCATGCTGTGGTGCCACCTCAGGTTCTATCGGGTACCATCCTTTGGTTCCGGGT
BARC-040339-07715	8	46.979	T	C	GCP/IBP	CGTCTTAGTAACCAATCTTTTCAGGTATATGGCCCATCTTTCTCTTGTCTGAACAAAAG[T/C]AGGGCTTTCAATACTAATTACCGCTAGATCATTTAAATACGATATATTTATGGTAAGTC
BARC-027614-06619	8	56.878	A	C	GCP/IBP	TTGMCGATMAAAAAAAAAACAAATGCCTAGGACTCTGCTAATTTGAGTGTAATAAGAGGAG[A/C]AAACTAAGAATGATTTGGGATGGGAAGGTTTTGATTTTCTCTGATTGCTACTTGGTAGAG
BARC-018941-03041	8	59.302	A	G	GCP/IBP	ATGACTCAGGAAACCCATGGGGGAAGATAAAGAACATGCAAGAATGAGAACCTATCTTGT[A/G]GAGTTTATCTTCCAAAACATAATTCTCTATTTAAAGCATACATGACCAACCACAGAAGAT
BARC-044663-08756	8	64.419	T	C	GCP/IBP	GACTCGGATAGTAGCAGGRATGGACTACTTCCTCATCTTCAGAGCCAATGATGAGTACGG[T/C]GAATTTCAAAATTACGGAGCAACTGTGCGAGTAATCGAATCGCTCCATTCAGAAACCTC
BARC-029669-06297	8	77.062	A	T	GCP/IBP	CAACACAGCAAGGAGAAAAAAAAATAATCTTAGATCCTCCTAGCAAATTATCCAAGTTATT[A/T]ATTAGTCAAAATATTTTTCTTATGGCCAGATCCAATCTCATCCCTATGGAAAGGAAAAAA
BARC-054143-12351	8	88.163	T	C	GCP/IBP	AATAGTCATCAATTTCTTASTGCATGTTGAAGCATTGGTGAGCTGAAGTTCTTGCCTTCT[T/C]GGGTACTATTTTATATCCAAATTCAGGATGTTAATTCTCAATAGGGGGATTGTAAATTG
BARC-062129-17664	8	103.87	T	C	GCP/IBP	TTGACTCACAAGGGCTTGCAAATTTGGGCTTAAGCCTAACATTAAGTCACTCATTTTATT[T/C]CAGCTTACGAGTTTATGGCCAACCATAACTTGGAAAAAGtaaaaatagttttttttaa
BARC-042715-08379	8	124.403	A	T	GCP/IBP	CTCTTGGTAATCTTCATTTTTATGGaccctttacctGTTCACTCATACTCTGGTTTAAT[A/T]GTCAAAAGCTTGCAATTCAGGTACTTCCTCAATCTGTTTGGATTAAAGAGGATTCTTAGT
BARC-020591-04686	8	128.798	A	C	GCP/IBP	GTTTGTAGCTTTGAACTTTAAAGTTGTCCGTAA TTATGTTTTTTATTTGTCTGATTGTC[A/C]TGCAGTGATAGGAAAAGATGGCTAAAAATGTCCATCCTAAGCACTGCAGGGAGTGGAAAA

BARC-054887-12192	8	136.308	T	G	GCP/IBP	CACATCAAAGCACCAAGAAAGTTCGAAGTCAAG AACAAAAGTGATATGATGCAATAATTT[T/G]GGT GCAAAAACATGCACCATAAAGTTTCTGGGTACCA TCGGTCTCCTGAATGGATCTCTG
BARC-007972-00189	9	8.557	T	C	GCP/IBP	CATTATTTATATTGGAATATGGACTATGGAGAAT TAGTGGGATATTTAATTTCACTCTAC[T/C]TTGTG TTTTTACAATCTGTGGATGCATTTTGGGGATAAT GATTCGAAAGTGAAAAACATT
BARC-028040-06720	9	23.81	T	C	GCP/IBP	AATGGAGATTGTTTCGTGAAGTGAGTTATTACATG TTCTTCTATAGGTTATATTAACATGT[T/C]TGTGA AATTCAATTTCTAATTTCTAGTTCCTTGACATGAA CTAGTATGCTTTTCATTTTT
BARC-028249-05804	9	39.511	A	C	GCP/IBP	GAAATCGGGCACAAAATCGCCCGACCCGAAATC CGAAAACATATCAGGGAACGACCCAGT[A/C]ACT AATTCGGCGTCGGTGC
BARC-007999-00186	9	57.208	T	C	GCP/IBP	CACTGGTATGACAGCATTCTAGTGGTGGCTACKA TGGTGACACTAATAAACATCATGGAA[T/C]TACT GGTGGCTATAATGATGACACCAATAGACATCAT GGAACTACCGGTGTCTATSSTAT
BARC-030181-06822	9	74.562	A	T	GCP/IBP	GGAAGGGTGCCTATTACATCAACCAAGTATTAG TTAAGAAGATGAACCTTCCATTAAA[A/T]CTGTT TGGCACCCCTTGGTTTTCTATGGAGAGGTAATTT AAATACAGTTACTTACACCCG
BARC-030025-06777	9	84.99	A	G	GCP/IBP	ATAAGATTGTGGATGAATGGAGGCCATGGAAC CAAATAACCAAGTTGCTGGGTATGCAT[A/G]TCA ACCCTCTATGCCTAACAAATTCTTGACTTGTATT AGTAAAGTTGTTCAATTAGCTA
BARC-060183-16458	9	89.402	A	T	GCP/IBP	CTTCAGAGTTCTATAATTGGACATTTTCAAATAA TAATCTCAAATAAATTTATCACAA[A/T]CCAGTG AACCAACTTAACTATCCCAAGAACAAAGCGCAA AGGATATCCACATTACATC
BARC-051769-11236	9	93.79	A	G	GCP/IBP	CCAATTTATGACTTCTTTTGACAGAAAAAAGAT ATTTGACTAGACAGAAAAGAGGGAAA[A/G]GAT ACAAAATGGTGTGTATGAACCAAGGTGCTAACTT TATCAGCTTAATTACATAATTC
BARC-018101-02517	10	10.747	A	G	GCP/IBP	CAACAAGATAAAAAAATTCAAAAATCAGACTATA TATACCCGTCTATTGCCAGAAACAGT[A/G]TCCA TAAATAATGTTTTGCTGACAAATAAGTGAATAAC ACAGCAATATATGTTATTTACA
BARC-018911-03277	10	25.524	A	G	GCP/IBP	CACAATAAATCTATATTAGRGATTTAGCAATGCA GGAATCAAACCAATGACAATTTTGGG[A/G]GTTT AAGTTGATCGAATAATAAGGGATTTACCAGCAG ACAGGTAACACAATGCAAAGAGA

BARC-035255-07160	10	41.762	T	C	GCP/IBP	TGAAAGTACAAAAAATGATGAGTAGGAATAGCC CGAAACAGATCATATTAATATTTAAAC[T/C]AAA TTGCATACTCACTATTTGTTAACACCTCTTCAGA CTCTCCTCAGCATCCGTTTTAG
BARC-051149-11016	10	47.348	T	C	GCP/IBP	TAAAGTAAATTAATGAACAATGGAAGGAAAAAT GTAATGATCCAAAAGCACATATTCATC[T/C]AGA GGTCTTATAAAGTTAAGCATATGCACTAGAATAA GTTCAAGTTAATCCACAAACTGTT
BARC-040749-07839	10	66.854	T	G	GCP/IBP	GTCAATTCGTCACTCACTTGAGGCAAAAGAGATC GTGCTTTGACTATGGATGAAAAACCA[T/G]ATTG AATGTTTACATTAACGACGTATAAATAATTGAAC AAATTCCAACGCAAATACCATC
BARC-029491-06207	10	82.103	C	A	GCP/IBP	TCTGGAAATGTGAAAGAAATAGAGACAAAAATA TATTTAATTGAGACAAAAATGCACTTT[A/C]ATTT CAGTCTTTTAAGTTAGTCTCCACTCTTATGTTTAA TTTTCATTCTACTCCCTAAA
BARC-050013-09288	10	94.973	A	T	GCP/IBP	CATTCCAAGACTCCTCTACATTTTGAAACTCCAA[A/T]TAATTTATCTTCAAAAATTCATAAATTTAAAT GACTCGAATCTTGATAGTTATAAATATT
BARC-065783-19748	10	117.856	A	G	GCP/IBP	AGTCCCTTAGGGCAAAACCAATTTTCACTACAAA CACCAAAACAAATTATTCAAAAAGAAGG[A/G]AACC TACTGAGCAGTGCAAAAAACAAATGAGAAATT TTTTCAAAACTCAATCTGAACAT
BARC-041591-08048	11	5.575	A	G	GCP/IBP	ATATAGCATTATAGTATTCATCGTAAGCTAGGT CAAATCGTTATTTAACACAGGTCTTC[A/G]TCCAT CTTTGTTATTCCTGTCAAATATATATTCCCCGAT TGAAGACTATTGCTGCATCC
BARC-041095-07905	11	23.856	C	G	GCP/IBP	ATTTAATTGCTAATTATTGTTTAACTTAACATGTT GATGAAATACTGATTTCTCCAATA[C/G]TGAAC AAACAAAGAAATCTTGAATTTTTCTAGTGATCTA CCCTACTGCGATATCCTTTTT
BARC-016539-02087	11	45.398	T	C	GCP/IBP	GGCCCCGCTGCAGGCAAAAATGGACATGCTTCT ACAAAGAAAACCTCAGCCAAGTGAAAG[T/C]TCTG ACAGTGATAGCTCTGATTCTGATAGCAGCTCTGA TGAAGGCAAAGTAAGTTTTTTT
BARC-032817-09052	11	55.573	A	C	GCP/IBP	AAGAAAAGCAAACCTTGACATTATCGTTGTTCTTT ATGACGGCTAAAAAACTAACCACGAG[A/C]GTC ACTGCAGTTTAAACTGTCCAAGTATGCAGAGCTA ATAGACATACATATCCCACTTGA
BARC-040309-07711	11	69.17	A	T	GCP/IBP	TGACTCTAAAGCAGAACAAGCAAAC[A/T]AGTTG CAGAGTCTACCTTAAATTCCCCAATTCCCAACTTT AAGGCCAGCATTGCTCAATA

BARC-050205-09457	11	76.856	T	C	GCP/IBP	TTTGGGCCACCTCTCAAAATAGTCG[T/C]AGGTT CCCAAATACCTTCATCCATCTTTTGTGGATGAGA ATAGCTAACTTTTCCATACA
BARC-042299-08241	11	92.47	A	G	GCP/IBP	AAATATTGATAACTCTTAGCCTAAGATTATTACTT TGATTTAGGTCAAACTTGTTAGAG[A/G]ATACA ATTGAAAGAAAAAATAATAAGTAGCAAATAGGA TAAATATACAAGGTCAGAATAA
BARC-054049-12291	11	101.754	A	G	GCP/IBP	CAATTTTATGTATGTGAATGTGAAATAGTGGAGG GGTGGTTAAAGTCAACTCTTGGAAGT[A/G]GAT GAAGGCAAGGAGAAAGGGTTTTGTTTATAARAT GTCTTGGTTTTTAAATCCTGCGGC
BARC-054037-12260	11	110.289	A	G	GCP/IBP	ATGATTGCAATTGCCAATTATTATTGCTCAGATA GGAACATCGATGTAACCTGATGGTCA[A/G]TTGA TCATCAATGTCTCTTATCTTGGCTGCTTTAGTTTG TTTGCTAATCTACTATTAATT
BARC-020149-04485	12	6.175	T	C	GCP/IBP	TCCTTCTCCCTTTTCTTCTCAGCATCCCCACTCTG CACCTGAAACGTGTACTT[T/C]CTCGAGCTCCCAC TCTTCTCCCTTTTCCCGTGATCTCAGCCGTCCAT TTCACGTTCTTG
BARC-027560-06613	12	9.802	A	G	GCP/IBP	ACAACAACAACAACGGGCCCCGTTAGGCCCGTCA TGAATAAAAAAAAAAAGTTGCAACAACA[A/G]CG TACTCATTTTCAACCCCATGATGTGCGAAGTGGT ATTGACAACGAATTTATGATTCAC
BARC-053059-11707	12	15.72	A	T	GCP/IBP	CAGAAAATGATGTCTGTCTAATAATACCTGGTAT GTGGAAAGCCATTGCTTTGTTTTT[A/T]TGCTC CACAAACAAATAATATACCAAGTGATGTAAAAAA CTTGTATGAGAAAGAAAATTT
BARC-052799-11625	12	31.367	A	G	GCP/IBP	TGTGGCATGTTGGCAGCTCATTGGAAGCAGTTA ACAGAATTTACGAGATTAAAGGCCGTA[A/G]AC ATACAAGCCCTCTGGCTAKTTGTGTTGGTGACGT ATCAGATATAGCCCGTTTTGCTGT
BARC-030145-06814	12	33.888	A	G	GCP/IBP	CTAGGTTTTACCATTTCCAACAACAACAATGACA ACATAACTAGCAAAAGGTCACATCCC[A/G]AATG TTCTGTTGTAAAGATCCCCAGAATTTGGCATCCG AAATTTTGaaTCATCATATCCT
BARC-032147-07327	12	52.74	T	C	GCP/IBP	GATCCCTGAAAGAGTTGAACCAGGTAGAGATAA AATGATGATGGAGTAATAAATAGTGTT[T/C]TGA GCAATGGATTTTGGATTAgttgtgtgtgtgttattgt tTGTGACTGATTGAGG
BARC-050237-09522	12	58.343	A	C	GCP/IBP	TTTCTACATCCAAGTTGTGAACCTTCGGTTCAGAT GTTCAATATGCAGCACCAAAATATAC[A/C]AAAA AAAAGTAGTACAATAACAAAATAACAAAACACA AACAGAAACAAGAAGATGGTTTG

BARC-061985-17608	12	62.138	T	C	GCP/IBP	GATACCAAATGATTGAAMAAATGGAACATACAC TAGTGACTTCTACAAGGAGGTTGCACC[T/C]ATA CTTCCAAAGTCATTTGATCAAAGTCAAgacaACC
BARC-050003-09283	12	78.391	A	T	GCP/IBP	ACTTTGAAGAATTCAAGCTTCAAGTTCCTTAAAG SGGTTGAGTCTTTGGCTTCAATTACC[A/T]GTTTC AATATTGGCATTGCTTCGTTTGTTAATTTGACGTT GTTCTTGGTTTGAAGCTGCA
BARC-049209-10821	12	83.151	A	G	GCP/IBP	CACTTATTCCATCGCACATACAACAACCATACCAT ACGGGATCACTCATATGTA[A/G]ACAGACACCAC ATGGCATAGCATAACTAATAAAAAAACATGGCAT AGCATAAATAACCAA
BARC-039237-07479	12	101.092	A	G	GCP/IBP	AACAAAACAACATCAATGCATTCAAAATGATAGG ATGTTATCTATCCACTCTTTTGAGAC[A/G]TCATT TTCTTCTCCATGCAAGTGCAAGGTCTCTAGAAC AACATGGGATGTTGGAGGCTC
BARC-019821-04399	12	106.142	A	G	GCP/IBP	GATGCATAAAAATTAAATTTAAAAACTATTACAT CTTATAGAAGCCATGCACGGGTTGAT[A/G]CTGG AAAGCTGATTGATGTTTACTACATTTCTTTAGGA AATGAATAGGTCTCTTTAAATA
BARC-035375-07174	13	19.184	A	G	GCP/IBP	ACTTAGTTTTCTTAGCAACTTCCACCGTGATCCGT AATGAGCAAACACCATATCCTGTCA[A/G]CAAGG ACGGATCCAAAATAGCCAAAAGTGAAAAGATAT ACATATGTTATTATCTTAGTAA
BARC-014411-01355	13	28.209	A	G	GCP/IBP	TATTAAGTCAGGTACCAGAAAATTTGCATCAATT CACACTCATGAGTCACCTGAACAAGA[A/G]CTAG ACCYGGTTTTATTGTTTGTATCACTGTATGTAATA TTAATGTTTTCGGTTCATAC
BARC-038405-10071	13	34.457	A	G	GCP/IBP	GAAAGTGGTGTAATTGTTCTCTCCACTCCTGTCT ATTACTGTACTATTTAAG[A/G]GAAGCACTGTA CAGTATACCTAGAAGCCCTACAGGTATTTTCTTA ATCTGGTTTCTGCA
BARC-050657-09804	13	45.033	T	C	GCP/IBP	TAAAGGGCGGTTCAATCCAGGGTCATTTTCAAAA TCCCAACTTACACCTCTATAAATGGC[T/C]ACTCG TGCCCCTATCCTTTTCTCGCATTCTCTCAAAAGT AAAAGAAAACCTCTCGTTTT
BARC-038413-10074	13	50.707	A	C	GCP/IBP	GCAATCTACTGCAGTTGAATCAACTAGTAGGTTT AAGTTCAATAGTCATGTTAAAAAAT[A/C]TAGG CTTGAAAAGATCATTGCAGATAGAAGAAAAATAT ATAATTGATTTAGAGAATGAATC
BARC-041649-08056	13	68.55	A	T	GCP/IBP	TTATATGACTCCAACCTTAAATCTCACTGAAAGCTT GATTTGATGCTACCCCAAAATACAC[A/T]CCCTCT TTCCCCCATGCCATAACATAAAGTA

BARC-028583-05961	13	75.921	A	T	GCP/IBP	ATGTCCATATCTCTTTAGTAATTTTTATAGGATCT AAATGGTATAGCCACTCATTAAATCT[A/T]TACCAT AATCTCTTTGTAAGAAATTAATGAATCAGTGAGA AATTTAGTTAGAGGTGACAA
BARC-046144-10286	13	85.177	A	G	GCP/IBP	TGTTTGACATGTTCCATGTTCTATTATATATACT CCATTTGTTGAGAGCATTTTTATTG[A/G]CATAAC CTTTGTCTTTCTGTTCAAGGTATGCTGATGTCTAG TTCTGGTTATGGGTAATTG
BARC-042953-08476	13	102.161	A	T	GCP/IBP	GCATGCATATAGTACAGAATAGTTGTTCACTAAT TGAGTTTTCATTTTCCAACCAATAA[A/T]GATTY CTTGCAAGTATATTAGGATCAGCAATTTCAATTT ATGAATTATGATGGGTGCTC
BARC-013365-00489	14	3.28	A	T	GCP/IBP	ATCAGAAAGGTTTCATCTCTACTTCTGATCACGCCA CTCTTCCCAAAACCTACCACAGGTCC[A/T]CACCT CAAGTCTTCTCATAATTCCCTCCACATTTCTCAAT GCTTCCTTCAAATAATTTAC
BARC-020561-04671	14	14.853	A	T	GCP/IBP	GactgATAGGCCCTTCAGCTGCCCTTTCACCGGCG TTTTGCAGGTTTCACATTATGATT[C/A/T]GGCTTA GGTTCAATAACCAATTAAGATGAGGGTTTGAG TTTCTCAGGATAGTCTCAGCT
BARC-044973-08857	14	25.48	A	T	GCP/IBP	TTCTGCTTTATTGCTGCTTGGGTTTGAACCATTCA TCACAGTTGAATTGCTTACAATCTT[A/T]GTTTCT TTCGATTCTGCCCCGAGATAAAtttgacAA
BARC-044549-08718	14	40.026	T	C	GCP/IBP	GCTCAATTGTTTTTTTTCTTTGGCTCCAGGCTG CCCAGGAAAGCAGAAAGTTTCTCCT[T/C]CCTGT TGGAATATCTTTAAATTTTATTTAATAGCTGATAT TGCTACCAGTATTCAGAAAT
BARC-064873-18956	14	45.456	A	G	GCP/IBP	CCAAAACAGAGGAAAACCTGATAGGAATAAGAAT TCATCTTCCAAGTGGGATAGGCCTTTT[A/G]TGA CATATCAATGAAGGCCTAAATAGTATGGGACCTA ATAATATCTGTTAGGGGAGAGTC
BARC-054615-12115	14	56.097	T	C	GCP/IBP	GGTGTGAAACTCGTAGCCTCCAACCTAGGATTCTT CTCGCAAGTGTCTTTCCAAGTGAATC[T/C]TGAG AAGAAGTTATGGTTGACGATGGAAGCTACGGGC GTTGCGAAAACCCGCAAGTGTCGT
BARC-052789-11619	14	65.173	A	G	GCP/IBP	CTGTCAGGAAAATAAATATTGGGGCTAAAATAG TTAAGGAAATTTAGTTTCCCT[A/G]CGTGACTTT GATATGTACCAATATATGAATAAGTTTGATCCAG GAACAAGTTGTTTACAA
BARC-013273-00464	14	80.364	A	C	GCP/IBP	CTATAAACTATAAAAGCTTTGCCCAGATGAARTT ACACTGCAGGCAAATTTTTCATTAC[A/C]TTTAG CTTAGTTATCTTCATTGTCGCCCAAATTATTCTTT GTCACATCTTTGTATTAGCC

BARC-039667-07536	14	86.643	T	C	GCP/IBP	ATTGTACGCAGCCTTACCCTTGCATATGCAAARA GGCAGTTTCTGGATTCAAACCTATGC[T/C]AAGT TAACAGACTTGTTTCAGGAAAAACACCAAGCCAA ATTCAGTTTTTCAACCCTTCTT
BARC-031363-07063	14	97.126	A	C	GCP/IBP	ACTTGTCAAGGATCAGGAATTCAACCTCGTTACC TTGACCGCAGGTATGGAATTCTGCAG[A/C]CTAA ATTTTCCCCTTTGTAATTTAAGACAAAATTTATAT ACAGTTCCTTAGTGCTTTCGG
BARC-025493-06513	15	9.972	A	G	GCP/IBP	ATCTGATGAGGTGTACCTTGGGGAGAGGGACAA TCCAAATTGGACATCTGATACAAGAGC[A/G]TTA GAGGCTTTTAAAAGGTTTGGAATAAACTGGCA CAAATTGAGAATAAACTCTCAGAG
BARC-039687-07541	15	18.773	A	G	GCP/IBP	GACCAGAAATATCTCATTCTGAAAATTTTCACGTT AAGTGACCAAAAAACAACAGCAATG[A/G]TATC GTATATTGCTCCCCTAAGGATAACTTATAATCGTT ATTTATAACAAAAAAGAAAA
BARC-041187-07932	15	31.257	A	T	GCP/IBP	AAACAAGTATAGGCATATTACAAGGCATGCCCCA AATAGCTACC[A/T]ATCTATTTTTTCTTTTGGTTT TTCTAAAATCCAATTAACACGGTTCAAAACACCG AAAA
BARC-018901-03270	15	47.292	A	G	GCP/IBP	AACAACTTTTCGCATATTATACATGGAAGGAATC ATTTTTTGGTCCAAGGAAGAAAGCAC[A/G]TGCA AGAGGGGTCTGGCGACAATAAGAGAGCTACAA TTAGCGATAAAACCACCGAGTGT
BARC-050109-09389	15	54.942	T	C	GCP/IBP	ACAAGAGAACGCAAAGACGAAAGTTTGACATT GGAGGTGAAAATATGAGGAAAGCACA[T/C]AA ACTCACTCACTCACAAGCTTACGCAATAAATCTC ACCGTCGCATGACACAGTAACTG
BARC-066103-17539	15	66.033	A	G	GCP/IBP	ATCTAACTTTCAATCTGTAAAACAAATGTACTCAT AAGAACTATTATCATAATAAGTAT[A/G]TGAAT TTTTCTTTTCACTTCTGTGTAATATAAAGGTATAT TCAGAAAATTTTCTAAAT
BARC-054787-12166	15	75.942	A	G	GCP/IBP	AGATCGGGAAAGATTATCCAACATAGGAGAART GGTTAGAGTATATGGGGTAAGGGTTTC[A/G]AT TTGGATGGTGGGGATGAGTGCAACTTTTGAGGA GGGAGGGGAACTCAAAGAGATTTTT
BARC-057969-15031	15	77.038	A	G	GCP/IBP	TTGtacaAATAAAAGTAATAATAATTGTACAAATA ATTCATCCTTTAGCAGAATGGCATA[A/G]GGGAC GAAAAATTGGTAAAACCAAGGTAGATGGTTAGG GGTGTAAGCCACGGACTCTTG
BARC-057281-14664	15	93.739	T	C	GCP/IBP	CTCTTCTTTGGAGCATTAAAGAGTTCATCAAAGAG CATCATGAAATTAAGTTAAAGCCTTC[T/C]AAGT GAGAGAACTCAAGCCAAGTTCTCTGTGTGAAA AATTTGTCATTATTGCCTCAACC

BARC-016027-02038	16	2.336	A	G	GCP/IBP	CATTTAGATTTAAGACAAGTGAGTAAATCTGGTG TCATTCACTCCTGTATATGCTAAAAT[A/G]GCCAC TACCATTGTTGTTTTTGGTTACAGAATTTGCTTT ATAACCCCTGACCCACATCA
BARC-028006-06717	16	11.362	T	G	GCP/IBP	GTGTTGTA CTCAATGATGAGATGTCTTTCTTGTA CAGAGCAACGCCTAGGGAGCTTCATG[T/G]CTTC TGCTATTATGTTGATCATTTTCAACCATATGGGCA CTSTAGATGCATARAAATGCC
BARC-030595-06910	16	23.797	T	C	GCP/IBP	TTACATGCAGATTATCAAGATGAACTATAATTCT AATCGAAGAATAACACCAAAAATACC[T/C]ATAA AACTAAATCAAAGTTTTGTGGTTTAACAAATGAC ACAGGCATTGGGATTCTCTTCC
BARC-031525-07106	16	34.782	T	C	GCP/IBP	TAAAGCCTTCAGTTAATTCTTTTGCTGATCAACGA TAACCATTCTTGTTTACTTATGTGA[T/C]TGGTCA TGTTGCTTTTCTTCTCGGATGCATATAAATGTGAA TCCTTTTCTCACGATGTTG
BARC-059867-16171	16	46.048	A	G	GCP/IBP	ATTAAAGATTTCTAATTATTAGAATATTTGATACA AAATTATTTGTATTGCTCTTGGGGT[A/G]TTCACA CTAAAGATTTGGAAGCCAGATTTGAACATGGTCC GGGGGTTTGTTTTCATATAT
BARC-031917-07226	16	60.927	A	G	GCP/IBP	ATTAAACATGTGTCCATTTACCTCAAATCATGTTA TCCGATATTTCAACAAGACTTTAAA[A/G]AATCCT ACGTGAAACCAAACATGCACTTActaGAAtAAGC AGAGTGAATAGCAGAAATAC
BARC-011645-00322	16	67.895	A	C	GCP/IBP	AGAAAATGTAGYCAATTAATATAATAAATGCAAT CAATTAATATAATGTAAATGTGCCA[A/C]AAAC TTCTACGTCAACATGCGGGAATTATGACAGAAAA AGAAAGAGAGAAAAAAAACATG
BARC-030433-06867	16	76.614	T	C	GCP/IBP	ATATCTGCctTACTAACAACCTCCAATTTATTCTTTC ACACTAGGTATTTGTCTTCTGTTT[T/C]GGAATAT ACTTTATCTTGGTTCCCTTTTCAGACTTCTTCAACC TGGGTTTGGATTCGCA
BARC-031515-07105	16	88.501	A	G	GCP/IBP	AGGYATAGATAAATAACCCAGTTGAACCACCACA TAGGAATGATCTGCAAGGGAAAATAA[A/G]AAC ACATAGATGAAGTGAGCTGGTCATAAACTTAACT TAAACTCAAGCCTCATTGAACTC
BARC-050393-09582	17	11.44	T	G	GCP/IBP	CGTTAATTTTGTGTTTGAAGGCGTGGAGTGAGCAA CGCTGGGTTGGGGCTCCGAAGAAGCC[T/G]CTC GAATTAATCAATCACCTCAAGAAGAATCATCGGA GGACAAAGCTTCCAAACACTGTT
BARC-043087-08524	17	21.029	A	T	GCP/IBP	TGCTATTTTAAACTCTCATGTCCTGTCAATCTTCA TGAAGTTTGATTTGTCATTTTTYW[A/T]AAAAAT TAGGTTCAAAGCCGAAGAGTAAGCCCAAAAGGG AGAAAACACAGGAGGAGAAAA

BARC-058841-15463	17	32.99	A	G	GCP/IBP	CGGGGCTAGTGCTGACATTTTGCYWGASCTRCTGGGTCTAT[A/G]GAAACAAGGCCGAATGGGTTA ACTGAGTCCAAAAATGTCTGATTATTAACCTGT CCAAA
BARC-048381-10555	17	41.551	A	T	GCP/IBP	ATCTAAACATTATAAAACAAAGTTCTAAAGGAATT GCATGGAATTTGCTACAAAACTATA[A/T]AAAA AATAAGATGCATATAAAAGAAGACATCTAGTTTG AACCAAATAGTTTGATGGAGTT
BARC-063551-18386	17	57.33	T	G	GCP/IBP	TCCACGGCATTGACTGACTGTTTTCAATTGGATA GGAACCAAATCAACTAATCAAGCTAG[T/G]AATA AAGTGAGATTAATTTGGCAGACAAGTCTAGTTGC AAATGTGAACTTTAATTTAAAA
BARC-062213-17705	17	74.476	T	C	GCP/IBP	ATGATTGCCTTATAGTTGGAAAGAGAGTTAAAA GTTGAAAGGAGAAGGAAGAGAAAGAAG[T/C]C ATAATTTCAAATTCTCTCACTAGCattttaataaaaatt aataactaatattatctaatt
BARC-019787-04375	17	78.523	A	C	GCP/IBP	CTTGTATCTGTATATGGGAAGTAATGGCAATGGC CAAGCCAAAAAGAAAATGGAAAAAAA[A/C]AAG AGGTTTGGGGGGTTGAAAAAAACTGGAAAAG GTTAGAAGTAAAGAGAGGGGGTTGTA
BARC-049255-10878	17	95.969	A	G	GCP/IBP	TGAAGAAGCCTCGCCTCTTCGTCATTCCCAAGAT CGAAATCCCCCAATTTCAATGAACTC[A/G]TTGA ATTTTTAGTTTATTTTCGACTATATATTTTGGAG AATTTTGAGAGTTACTATAAT
BARC-048855-10738	17	109.308	T	G	GCP/IBP	TACCATTCCAACATTAAATATCTTGAATGAGTTGT TTCAAGAATAATGATATTAACCTGA[T/G]AAGTA TTATTAGGATTTACGCATTTAATCAACCCACTTA AACTCCTGACTCATAAGCAT
BARC-039151-07458	17	116.098	A	G	GCP/IBP	AACTTTAGTTAGTACCTATCTGCTGAAGAAGAGA CCCCTGCGTTTGTGCATGTGCCTGCG[A/G]TTCC TCAAAAACATGGTCAAATTAGTTAATTTAATTGA GTAGAACCTAGTTAAAAGAAAT
BARC-014403-01354	18	1.533	C	G	GCP/IBP	ATCTTCCTACAATAGAGTAGTACATTTCAGTCAG ACTATCCAAAAATTGTTGTGATGTTT[C/G]TGAC AGTGACAACCACCGTAAAATTGCTGCTAGTTAGT ACTTACACAATAATATGATGAA
BARC-012295-01800	18	11.12	A	C	GCP/IBP	AATAAACAAACGCAAGCTAGTTGCACATGATTG GGAGCAGTTATTCTACTTTCATATAGT[A/C]AGG TTATAATTGGTCACTTTATTAGTTACTGTGGAATT TTCACGGTTCAGAAAGGATGAA
BARC-046934-12799	18	26.922	A	T	GCP/IBP	AGTATAAGGTGATGACAATTTAGTCTCTGRAARA AAGAAAATTTTGA CTTGATCCCTAAA[A/T]ATGT AAAAAAATATGACAATTAGGTTCTGCCATTA

BARC-063581-18909	18	41.17	A	G	GCP/IBP	TCCTTTGAGCGAGAATAGATGAACTTTGCATAC AYATTTACAGTGCATACACAAATCA[A/G]GTCT GGTTGAAAGTTCTCGAGCTCATCCATATAATCC GTAAGTGAAGTAAATAGTCART
BARC-047582-13000	18	48.948	T	C	GCP/IBP	TTGATTCATGGCAARCAAAGCCAAYRGTCAAATG GTGCTAAGACTGAACCTCTGCATTT[T/C]GCAA GAACAATTAGAGTAACAAAATTATACCATGGATA GTTGTAGCWATTATACCATGGA
BARC-047516-12955	18	55.603	T	C	GCP/IBP	ATCATAATATTTMAACCCTAATGACGAAAATTGT RTCCATACTAATTTGCTTTCTATCTT[T/C]ACTTCA GATGCCACAAAGTCAAACAACCAAGTAGTGGTA AAAATCTATCCATGACCCCCA
BARC-040163-07672	18	69.503	C	G	GCP/IBP	AGTTGACTTAGCAGTTGAGGAAAAAAGGGAAG ATTGTGGATTCTGAATTCCTCACACTAA[C/G]ATTT AAACAAATTAAGATCTAACATTGGCTAATAATAA AATRAAAGGacttaaaaaggtc
BARC-037195-06738	18	78.278	A	G	GCP/IBP	TCAGGTTGTATCATTTTTTTAAATTGTCTAGATGG TCCTGTGGGTTATCTCTTCTATCTC[A/G]AAACTA TAAAATTGTGTTCTATACAGGCTGATCAGTCAGG AACTATAGTTGAAATCGTTG
BARC-031343-07057	18	90.462	A	G	GCP/IBP	CTGGTCAGGTTAAGATATCAATCTGTTATATACT ACTATAATGTGAATGGCCTATATTAT[A/G]GGAA GTTGCCAGATAAAATACAAAAATAATGAAAAC GTAATCTACCTGCAGGGACCCAT
BARC-030123-06813	18	101.849	A	G	GCP/IBP	ATGACAATACAGATTACAGAATARTAATTTTCGTT TCAAAACAAGAGTCTTTCATTAGGGT[A/G]CTAC AAAGGGGGCAAAAAACCAATGAGGTGTGGAGC TTTTGAAAAGGTAACGAATCAAAC
BARC-039375-07306	19	3.735	A	T	GCP/IBP	GTTATAATTACTTACGGAGAAGTTTACGTGGATA TGACCTTATTCTTCTTTTTTTTCAA[A/T]CATATG ATTTAATCCTCTAAGAACTAATTTACGTACCAG TTTTGTTTACACAATGTTT
BARC-050993-10894	19	18.162	T	C	GCP/IBP	CTAGTTTTAACTTGTCTTTATTTTACCTTTTTTCT AAAGGCTTTTGGGACCTAACC[T/C]ATCAAATAG GGTCTCCTTTACTTTTAATGAAAACTTTGTTTTGG ATTTCCATGTTGTCTA
BARC-064129-18562	19	34.396	T	C	GCP/IBP	CAGAACCTGCTTTGTTTACAGAACCTGCTCT[T/C]AA ACAAAAAATAAGTCTAACTCCATGTGTTTGGTGC GAGCATGAATAACCAAATTATGAG
BARC-042665-08342	19	46.098	T	C	GCP/IBP	TCACAAAAAAGGAAAATCTGATTTATGTCAATG CTTTTTGTTTCTCAGCTTTAGCTATA[T/C]AAGTC AGACAGCAGGATGGAAGTGTGTAGAAAGATGTT AGCAGAGACCAACTTTTCTTTT

BARC-059657-15973	19	56.987	C	G	GCP/IBP	CACATTATATATACTTTTCATTGATTWTTTTTTTAC ATATAAAACATTATTATCTTAACCT[C/G]AGGCTT ATTAGACGAGTCATGTTTGAGATAAAGGATATCA ATCTCAACCTAAGTGAGGTC
BARC-013061-00434	19	73.904	T	G	GCP/IBP	TTTCCGGGGTCTCATGGCATATGAACAAT[T/G]A TATTAAGTCCAATGGGTGGATTATATCAAACG CATGCAAGCAACACTTTACTCGCTG
BARC-064609-18739	19	86.302	A	C	GCP/IBP	CTCAATCTGATTATAACCAAGCTTAGTCACAGAA ACACTGGAGACACTTGAAATCCCATG[A/C]ACTC CTTTGAAATGATTTACTGGAGGTATCTTCATTTCT TGTGCAGCAGATATGCCCAGC
BARC-014385-01342	19	100.692	A	C	GCP/IBP	ACACATTAAGTAGCATAAAGCAGGATTGAAAAA CAATTGGAGGAACAACAAATTCCTAG[A/C]GG GAAACCTTCTTTTCTCCTcagcagctggggcggcagca gcagcaccaccaccaccWg
BARC-042281-08231	20	3.052	A	G	GCP/IBP	CTTTTGCTGTATCAGCCTCTTTTGTTGCCTTTTCA ACCCTTTCTGTACAATGTATAATG[A/G]TGATGT CATTCCAACTTATCATAAAGATTAAGTCTACCAG ATATATGCATTACAAAGCA
BARC-052017-11314	20	19.964	A	T	GCP/IBP	AAATTGACATTTCTCTTGTTCAAATTATGGCAA TAAATTATGTTTATATATGTATTAT[A/T]GATTAT ATTTAACGTTTCCACCCATTATTGGTCTTTGATG GAAAATTCTTTAGAAAGTG
BARC-029827-06444	20	29.561	T	C	GCP/IBP	CCTGGATTCTTCATCTAACTACAAACCCATATTGG TTAATGAAGAATACAACAAAGAGAG[T/C]TAGTT AAGAGCTTCTGCAGAAAATTACCTGCATGTATTT TAACTTCTCAGCAGTCAGCTC
BARC-015861-02878	20	41.895	A	T	GCP/IBP	TGCTATTGTAATCTCGAAAATAGAATTACTAAAG CTCAAAATTCAGTTGGAAAATAGGCG[A/T]KTAC TTGCAACTAGAGAGCTTAGGAGGTTATTAGTTAG TAAATCAATTCCACTCTTGCC
BARC-029803-06418	20	50.849	T	C	GCP/IBP	AGAACCTTTTTCCAAGTTTTGAAGTCATATTCGAT TTTCCTACCGTTTATAGCCATATTT[T/C]CAATGTT CAGAAGAGGAAAGGTGATATTCACCGTATGTAT GTACGTATGGTACATTTTCT
BARC-044361-08677	20	85.381	A	G	GCP/IBP	CAATGAAGATGTATAGGTATCTTACTGATCATCC AGCTTGATTTTAGATGAGGCAAGC[A/G]CTGA GAATTATCAATTTCTTTCTCATAGATATGATGAA CATCAGAAGTTGTATAGAATT
BARC-064735-18787	20	106.953	T	C	GCP/IBP	TTAGTTTAGTTTGAATTTATAGATCTTTCTAGAC GCATGTCATGGGACAAACCCATTTA[T/C]AATTC TTGTTAGTTTTCTTGAAGACAAGataatataaaaat aaatatthaGAACCTTAA