

TABLE IV(supplemental) PCR Primers used in verifying SNPs

PRIMER NAME	VERIFY	FLANK A	POLY	FLANK B	PCR A	PCR B	CHR	POSITION
INJA1_003	Y	gcacgcaggtctctcttcgac	tc	ctccgcaaacccgttctctgtc	5'-catttgaaagccttcgcgcgtagc	5'-gttgccaccatcaagctgaccac	1	8411318
INJA1_005	Y	cggcagcgggattcgctctct	ct	tcgagggagaggggccactgca	5'-cgtaaccgccttgacgctttcc	5'-cagtggtgacttgggcaatgac	1	12700241
INJA1_009	Y	gggttgtaaacgcatttgat	gt	tggctgcatgacacgatgatg	5'-acttggttgcttgggaaaagc	5'-tgtctccctctgtgaatcgctc	1	18204524
INJA1_010	Y	tcgcgccacgcaccggaact	ct	tgtcacagcaccgccacaag	5'-tgccgattgataggaggacacc	5'-accaacagcactgcgaattgc	1	20279756
INJA1_011	Y	atctagatggagtcagcgta	ga	aatgtattctctcgcggcaga	5'-tctccctagcagaatgcgaacg	5'-caaacgtgctcatcgcgtatgt	1	21413159
INJA1_012	Y	cgccggcgccggcgccaccga	ta	agtgcacgctctgtcgtccc	5'-acgcaaacacacctcacacg	5'-tctcaactccgtcaccaaacac	1	23382747
INJA1_013	Y	gtaaaggtaaaagatcaaaat	ct	ttagaaggctttctgtcagtg	5'-gcctctgttctcgccttcaacg	5'-tggatcatgccattgccacg	1	26242720
INJA1_014	Y	gcccgcgagaggggaggcggt	gt	tatgagtgaggggctgtggcg	5'-tggttgagcttcgggaagctg	5'-tgtggcagaatcgccaaaacc	1	28074914
INJA1_015	N	gcattgctctcatatgtgtac	tc	ccagggtgctcaccgaagcaga	5'-agtggatcgaaatcggttcgagc	5'-catggagctgacactacgctac	1	30071164
INJA1_016	Y	tcctccaaatccccctctctg	ag	gcagaatccatgaatcaaatg	5'-acaaggctccttactcgtgtgc	5'-tcatcgaccttgagcttccag	1	33037278
INJA1_017	Y	gccgcgctagccagcgctcc	tc	catcagcgacctctccatcat	5'-caaccgactcaaaagcggctc	5'-acaagctgcaccaaacgacc	1	34278058
INJA2_001	N	atataagtagtaagccacccc	tc	ccaagatgagtgctctctct	5'-tcttccccaaagagtcacatcg	5'-tgactggaaggagacacaaagg	2	947862
INJA2_003	Y	atgtacgacctgaagcccaag	ag	gtgtgcccggagagaagtgcgc	5'-gtttgcccgaaggagccttcaag	5'-catggagcttggaaccaaacac	2	4395269
INJA2_004	Y	ctcccaagcactccctttcat	at	tgttaattttgaggggtgtgt	5'-gtgaagggtcgtaatgctgaagg	5'-cctttccggtgattagcactgc	2	7896213
INJA2_008	N	atgaactgtgccgcggcgagg	ag	ggacgctgcatctgtagtatc	5'-agcgactcatcgcaagcaac	5'-actgtatcactctgtgtggagc	2	12222941
INJA2_010	Y	cgactgatcgactagctacca	ga	agtttactgtacgaggaatga	5'-cgctgtgaatcaaccgctatgc	5'-cgctacaacaaccacagcctac	2	16391606
INJA2_013	Y	gctcgctgcgcagccagctgc	tc	caggaaggagctcatgttagg	5'-tctctcaacttccatcagcagc	5'-gtgtgctaacgtggcaacctg	2	24895055
INJA2_014	Y	ccatctcaccactagcatattt	gt	tcccactccggcgcaatccatt	5'-acccttctgtttgggtccttcc	5'-tcgggacaaagcaatggcgac	2	25844676
INJA2_015	Y	tgtatacactgataatactat	gt	ttacaaaggagtagacacgtca	5'-tgcaagctgattggcgtgac	5'-tttgcattgagcgcgaacctc	2	27116059
INJA2_017	Y	tgctccgggatcaaccgcttc	tc	cggtggcgctcttcgcgcgtcc	5'-gcgtgtaccagatgatgcactg	5'-gcaagcaaacgaaggatggtcc	2	30991182
INJA3_003	Y	ggaatgatttgcggcgaagtta	ta	accgccgtcagcacgaatttc	5'-caatgaacggttggaacagcctg	5'-tcatcaagcaatgctctggctg	3	6143709
INJA3_004	Y	agagtcctatgcgaatgactga	ta	aaggctctccaacagcagcat	5'-tgggttgacgttccgggtctac	5'-acacattgcctgtcgtggac	3	7088875
INJA3_007	Y	atgcgggcactggacattgtg	tg	ggcagggtgtagacacgggtgt	5'-ccatattcgttcaacgcagcctc	5'-cggatgaagaactgcctgtgtg	3	11688283
INJA3_008	Y	caccagctagctgcagcgacc	ac	cctgtcacactgtgagtcac	5'-acaaaaggcgattgggcacaaac	5'-tgtctgatttgacgcctaaag	3	12434996
INJA3_010	Y	actccatgcctgtgtggcagt	ct	taaactctgtattgaggtcgg	5'-tgtggccacatcacgatcgttg	5'-tctccccatacttagcgcatgg	3	14420981
INJA3_012	Y	tcggttgtagtcgagacggctg	gt	tgtttgattaggatgatggtg	5'-accgaacagcaaacagcagc	5'-tctggacgttgatcacgttatg	3	16556710
INJA3_013	Y	tgtacgcacgtgagttgaact	ct	tcaggctggttggagatgatg	5'-tgatatggcggatgtggaggtc	5'-tctccgcactacagcagtgtgc	3	17293301
INJA3_014	Y	aaaaagcgaaaaactagatgg	ag	ggtgaaagtgaagaagttcag	5'-gttgtggcgattgagtcagttg	5'-tgtttggcagactctgtcgtcg	3	18191854
INJA3_017	Y	cgccccagcgttgccgtgcg	ag	gtccgacgacacactcctaaa	5'-ctcacaagccaacgccaatctc	5'-ccgtcactatgatgccacaagc	3	23737564
INJA3_018	Y	tgaatcccatctcggtatcgg	ag	gtgcacagttgctctgtgtca	5'-caaaagaagacagggttcccagc	5'-ccaccatagcattgtctgaagc	3	24828483
INJA4_002	Y	ttgttcaacgcggagtgtatt	at	taccaggttaactcttaagag	5'-acatcaggggacagctcaagctc	5'-acaagctgtgtgacctgtttg	4	3376534
INJA4_004	N	tccaacaaggagacacccctc	ac	cttctcgtgtatggctcaga	5'-acggctcctagtgtcatcagtc	5'-tgcttggcttgaacccgtc	4	6031035
INJA4_005	Y	ggccagagcgttgcgcgcctcg	tg	ggattgacctcatcttggcaa	5'-gtggacaacaatcccgtcatcc	5'-actgtgacagcaccagcttctg	4	8940540
INJA4_007	Y	gaacattggtatctgtgtact	ct	tgcactcttaacatctagct	5'-accgattctgtccagctatgc	5'-cataaccttgacacacggcgctg	4	11378593
INJA4_009	N	ctttctgcacactgcctctg	ag	gtgcctctcatcgcagctgtc	5'-ctgctctgttgacggctatgc	5'-cacaagacgaacctcagtgatgc	4	15277062
INJA4_010	Y	acagcagcatgaacacgtcgg	ag	gggactacaaacgcaccccc	5'-gagttgaagcactcgtctgttg	5'-tcccttaccattcagcaccag	4	17238703
INJA4_011	N	agtccaagatctgcggggatt	gt	tgcgggcatccaacaattgat	5'-ctccatgtgctgttgaggctg	5'-accgttcacgcagcgattg	4	18296195
INJA4_012	Y	cgccggcggtgcgcacgtcgc	tc	ctgacaggtgggcccgtgtcg	5'-aaagcacaggatgtcctcttg	5'-ggatcgctttatgcgccagatg	4	20006822
INJA4_014	Y	acctcaactgtctcaacaattc	tc	cccttaggagggttaccacgtc	5'-tggcacaagggtgatgggtgtg	5'-gcggagttgtttctgtgtcgtc	4	24325950
INJA4_016	Y	gccgatgagtactgttaacttg	ag	gtataccggaggtattggcgt	5'-ctaccacgttgggtgtcaaac	5'-acaagttgagggacaccttggtc	4	28094540
INJA4_019	Y	tgaagaggaggctctccgta	ta	acatcaagacggccctcttct	5'-gcatcagcatcaatcagccttg	5'-tcgttttccacgcgcatgtc	4	33880822
INJA4_020	Y	caacctaaagactcctccca	ga	aaggttatttgaggagtcctt	5'-gtctgggacacttgtctcaag	5'-agttgaggcaccagcattgc	4	34378014
INJA5_001	Y	gaacccccaccggcaccaagt	ct	tgcattgtgagagagcttgg	5'-acgaacagctagagggtcacac	5'-aagattgtgtgcccacagtc	5	819033
INJA5_005	Y	ggatccacccccgggaagcagc	tc	ccgctcgttgttgctgcata	5'-ctcactggcaaacgcgaagac	5'-acgtctgcatatgcgagtcacg	5	5649455
INJA5_006	Y	ctgagttccaggattgtgggg	tg	gaagtggaggagaagggtgtg	5'-tgatggttagcagcttaggcagg	5'-gcagtgcaacaccaacttgc	5	6547604
INJA5_007	N	gctcacccggagaaagagggaat	ct	tcaatgatggagctcagcggc	5'-agaagctccagtgctgcacag	5'-tcaattgggaacgccatcatgc	5	10384293
INJA5_008	N	caggccccaccgccccaccgccc	tc	cgccgcgcacctcttctgtct	5'-aagtacgcaagtgcagggtgc	5'-gaaatgcaccgagaagctgacc	5	11944667
INJA5_009	Y	cagttgggactcttaagagga	ca	accgctaagcaaaatagcata	5'-acgaagcaaacactactgtctc	5'-agatgtgcttgcactatgc	5	12842418
INJA5_011	Y	cgaatcaagagctcgcagcagc	ag	ggcgacataggtggggaagtt	5'-tgtaggtgacgaagtgtgcctc	5'-catgtactgtgtgcgttacac	5	14110205
INJA5_012	Y	gccacttgagccgataaggcg	ag	ggaaagaaagagcgtgtgcg	5'-tctagccaacctcttctgttgg	5'-tctgtgtatgagcgtctcaacg	5	15975578
INJA5_013	Y	acggaggccttgtgcctctcg	tc	ccgctctcttgcatcacat	5'-aagagggttgagagaggcttcg	5'-tgacccaacctattggaccagg	5	17118345
INJA5_014	Y	acggatcaaacaccacaaaat	ct	tacgaacctccgcccccaaa	5'-ggtttccaacctcagattgg	5'-cacattcccagctaacgacag	5	20301621
INJA5_017	Y	ccacaacctgaagcttctgttt	ct	tatctgcctcagacaaattt	5'-agaggacatgaccccaagaagc	5'-gtttgttgcactgactgattgc	5	23633518

TABLE IV(supplemental) PCR Primers used in verifying SNPs							Feltus_TableIV		2
PRIMER NAME	VERIFY	FLANK A	POLY	FLANK B	PCR A	PCR B	CHR	POSITION	
INJA6_001	Y	gaggcgggtcaggcagcagct	ct	ttgtgtctctccactgggtgc	5'-gctgtgtattccacagtggag	5'-cgttgggggttagtttgggacg	6	515030	
INJA6_003	N	agctctctccaatcatcacca	ga	acgccccggcgccgcacatctc	5'-cggatttggagagcggttttgc	5'-cggacatcacgattcacgaagc	6	1171276	
INJA6_004	N	agaatagtgttaattaccacg	ag	gaaatcatcgtcgcacaatgtt	5'-cagcaaaaggatgtagccacctg	5'-tgggttagacatggagaaacctac	6	2925683	
INJA6_009	Y	catggcggctcgtcggtgtgcg	cg	gctccagggcgcttctgtgggca	5'-tctccttccatacgcatacgtcc	5'-gcttcacagtgacagcttggtc	6	13175646	
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INJA6_012	N	ggagggtgggagcaaaccttag	ag	ggtttgtggacccttaattgg	5'-ccaaatcgcaagcagcactagc	5'-gacatctcgtgatgcagcaacg	6	15024259	
INJA6_014	Y	ctgtgcggtgtcgcacaacaata	ga	atgccgcttaagcctagccgc	5'-ttctacgtgacacgggatcacc	5'-tggtaaggatcgtgtcgtctctc	6	16471639	
INJA6_017	Y	caaacggtaggctaagcaggt	at	tgtggcatgcctaataatgtgg	5'-agttgcctgtgtcttggagc	5'-agatgatcggatgctggctctg	6	20132968	
INJA6_020	Y	cgggcgcgagacagatgtacca	ta	agctcgttagcttcacagaag	5'-tgttgttgtggcccaacaacg	5'-gcacagatgctgaacatgctcg	6	28865894	
INJA7_003	Y	tctttacttagtaaacgagg	ag	gaagagcaatccagctgatat	5'-tcagagttgtgtgcacacttg	5'-acaggaagagcgacgaatgagg	7	5544608	
INJA7_004	Y	tacatggtggctggctggcgg	ag	gtcggggcgctaaaggggttt	5'-ccttcaaaacaagcctccaacg	5'-agcttgcgtgacgctcaatg	7	6688127	
INJA7_006	Y	attctacttagggcgacgg	ag	gcttcatgcttacttgacgg	5'-gtcgaaacgacaacctgtcacg	5'-tctacatcaccggccaatgacc	7	8698315	
INJA7_007	Y	gcgcgtgatacttcccgccggc	ag	ggcagcacgtgcacctactccg	5'-ccttttccgaccaagccttgtc	5'-acagtggttgcatgatggcac	7	10535336	
INJA7_009	Y	ttttgccccctccccgtctc	tc	cgccctcggtcacaaactcac	5'-gccccaccaaaaatgaagtccacg	5'-tggaggttggaaatggatccacc	7	12289362	
INJA7_011	Y	cagagaaactgctgatctgg	ag	ggctttctatggtcctgatt	5'-cttgtccccatcagcattcagc	5'-acagcatgaagtttcagcgcag	7	16850436	
INJA7_017	Y	ctgcaaaaaatgactggttgag	ag	ggacagagcaaaaatgtaatgt	5'-gtgatgctgttgggtgcgtacc	5'-aaagcaagttcacgcgcctcg	7	25057378	
INJA7_018	Y	cctgcaaaaaagagagtggtg	ag	gaaggagctgtgtttaattc	5'-tctctgtatttcggcgagtcc	5'-agcggatcaagacaccttccag	7	26497395	
INJA9_002	Y	gtatttcagatgctacagta	ga	acagtatcgatgtcacgaagt	5'-gacgcagaggtgtgagctgtg	5'-aaaccaaaactcggcgtgtcc	9	1023895	
INJA9_007	N	tttattgaaacaggttacag	tg	ggcatttgtcgcagctgaacc	5'-acttctcgggatgagcctcaac	5'-tccgatgatgatcgtccagtgc	9	6672882	
INJA9_013	Y	acctggcgcaaccgggccgcga	ga	acgcccgtgaaaccgcgtggg	5'-ccaattctgcacgggaaaacgag	5'-tgtacgtgttacgagcgtctgc	9	15566800	
INJA9_019	Y	gaacgtgtggaacagaatttc	tc	cggggtaggcgatcacagagaa	5'-agttcatcaacgccgtttcg	5'-agaagctggagagcatgacacc	9	20955764	
INJA9_020	Y	gcttgcacctgcctccaatc	tc	ctccctccatggcgtgctga	5'-caagggcgaatgtcacgatgagg	5'-gacagatccgctcaagagcagc	9	21599081	
INJA10_001	N	gacctctcttaattgctgt	ct	tgttctgtaataactaccaagc	5'-agatcaaggctgagccctctc	5'-agtgttttcacgggtggcag	10	559878	
INJA10_002	Y	ccgatgtgcgttaggcatgc	tc	cgagagcgaggttggcatca	5'-gcacacggttatgagcgatacg	5'-cgtcacgtcaatgccatgtagg	10	2653546	
INJA10_003	Y	agcccccatggcggttacag	ct	tgcagttccaaacggcaaata	5'-accacaagcagatgcaaaacg	5'-ctgagtaaaacccgtgtgccac	10	3581882	
INJA10_004	N	cactgctcaagaaaaagggcg	ag	gtacagcttgactccggagga	5'-gttcaaacctcttgcgtggctg	5'-gaaacttggagacacagccacc	10	4344784	
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INJA10_009	Y	gcacacgtagatttggttac	tc	ccggatgagcaacgcacaaatt	5'-ctgcgttgaagcagcgatcag	5'-ctaattgcccggttggtgaagc	10	9244943	
INJA10_010	N	atataagtagtaagcccacc	tc	ccaagatgagtctctctcct	5'-tgtaggtggttccaaaggttgg	5'-tgacttgaaggggacccaaagg	10	10295837	
INJA10_011	Y	ccaccagcatcgctacgctg	ct	taccagggcataaaggtctg	5'-gcagaccacaacatgcgtacag	5'-ccttcttcaggtttgccac	10	12993718	
INJA10_013	Y	tgaaacagcttgctgaactg	ag	gcgaatcttgtggagcaacc	5'-ctcgccacattgacgatcacac	5'-ccacaagctaccatttgcagacg	10	14105055	
INJA10_014	Y	aactagttagcccaaatgg	ag	gctgcaacaaagctgtagct	5'-gcacttgcattctctccatagc	5'-ggtggtttagtaacacctgc	10	15747187	
INJA10_016	Y	catccatccagatgtctgac	ac	ctgcacgtactagtacagcat	5'-tgaagctgatgcccaacaagc	5'-caacaacgacagcctgctatgc	10	17212262	
INJA10_019	Y	gtttaggttagagtactccg	ag	gtagtcaggctcctctgttgc	5'-cttgtcacaaccagcagaacc	5'-gatgccagatttctgtcgctcg	10	20420736	
INJA11_001	Y	ctgcaacgcgagactctatgg	ag	gcgcacgcgggtgtgtgtgagc	5'-agcacagtaggaggccaacttg	5'-gtcctaaatggcagctcgtaag	11	880698	
INJA11_002	N	tgtgctcgtcagtgtgccata	ca	aactataactccctctgaga	5'-tgcctcaccaacgccaagac	5'-acgacgggtagtgtacgatgtg	11	1053546	
INJA11_004	Y	gcctctcgtgacctgacgtt	ct	tgactcaccgacctactgcct	5'-tgcttgcctgtgtcaccacc	5'-cggcatatttgaaggctcaagc	11	2258937	
INJA11_005	Y	ggtccactgcgagaagacgtg	ag	gcacgataatctcccagagct	5'-acagcaagcacgctgtatgtc	5'-acacaccaccattctcacctgc	11	3487865	
INJA11_006	Y	gttgacgcagctgcacttcatc	ac	cagcgcgtcgtgacagacaa	5'-gctgtcttgtagaatcggcagc	5'-gaatcgtgtgtccgcatgttc	11	4370253	
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INJA11_011	Y	gctgcacggttgaatcccttc	tc	cagtttgttcttctgactctg	5'-agcataacgaagatccggcctc	5'-tgcgtactcgtgccaaaaaac	11	10086410	
INJA11_013	Y	atctcaagggaagtgtgcta	ga	aggtttggaaaacaacgggaac	5'-gctgtgagattccagccaattcc	5'-ttccagaccgttcgctctatg	11	14244303	
INJA11_014	N	agtccagatctacctgcggg	cg	gttcaactgttctcgtcgaag	5'-agtggttcacacctgcacactg	5'-gcataactctgtggcactctgc	11	15638783	
INJA12_001	N	gcacaagcacacatcacggat	ct	tagcacagtgcgcatccac	5'-tgaacccaacgagatcacgctc	5'-agcttgcctgaatgccacag	12	1316827	
INJA12_002	Y	gcgcaaaaacgtcgtgatccg	cg	gacggccgggacaggttcttc	5'-gaagctccgctatggtgttttc	5'-accagatgcagtcgtcctctc	12	1908112	
INJA12_003	Y	ttctgttttgtctgtccag	ag	ggcggagaggggaggttc	5'-tgggaaaacgtgacttagggtc	5'-acaaaaagctcgtacgacctg	12	3579048	
INJA12_004	Y	ccgcacctggcatatcattg	cg	gacaagagcactgccaaagaaa	5'-aagctgttcgacgcaattcgtg	5'-tgcacttgcacgctccaagc	12	4104359	
INJA12_005	Y	agactaagttgaaggcgctcg	ag	gttcttttcttctctccac	5'-tttggttgcgtcccagactg	5'-tgtctgactccaacatctggacc	12	5020848	
INJA12_010	N	acatacctcgttagtctactaa	ga	aggcgaaggggagagcctcgg	5'-tgacgggcaatagactgtcac	5'-tcttgaaacacgaggttcggac	12	11624942	
INJA12_013	N	cgcaaaagggaagttggtgtca	ga	aagtgcacgacgaaagcgatac	5'-cgctcagctattcgacttgctg	5'-tctcttgcttggcctagtgtc	12	15192379	
INJA12_014	Y	ttagaccgcgagcgaagaagt	ct	tagagagcagcgccagtgcac	5'-aaggcgaagtttggacctgc	5'-tggcgaaaaggtgcacagctc	12	19626029	
INJA12_016	N	attgtagcacgtgtgtggccc	tc	cagcccataagggcctatcggc	5'-tgtttacgacttcaccccagtcg	5'-acgcgcataaaaccttaccagc	12	19964554	
INJA12_017	Y	tcatgcaccatgcttgcctgcg	cg	gtggaatatggaacacaacta	5'-tcccatcatctcaccgagcaac	5'-ggtaacccaacaagcgcactc	12	21360459	
INJA12_018	Y	gccatccacgctgactccgca	ga	atgcgtgcccatgtactcctc	5'-tgcaagctcattggcacaactc	5'-tctgaccacatcatctgggtc	12	22153602	