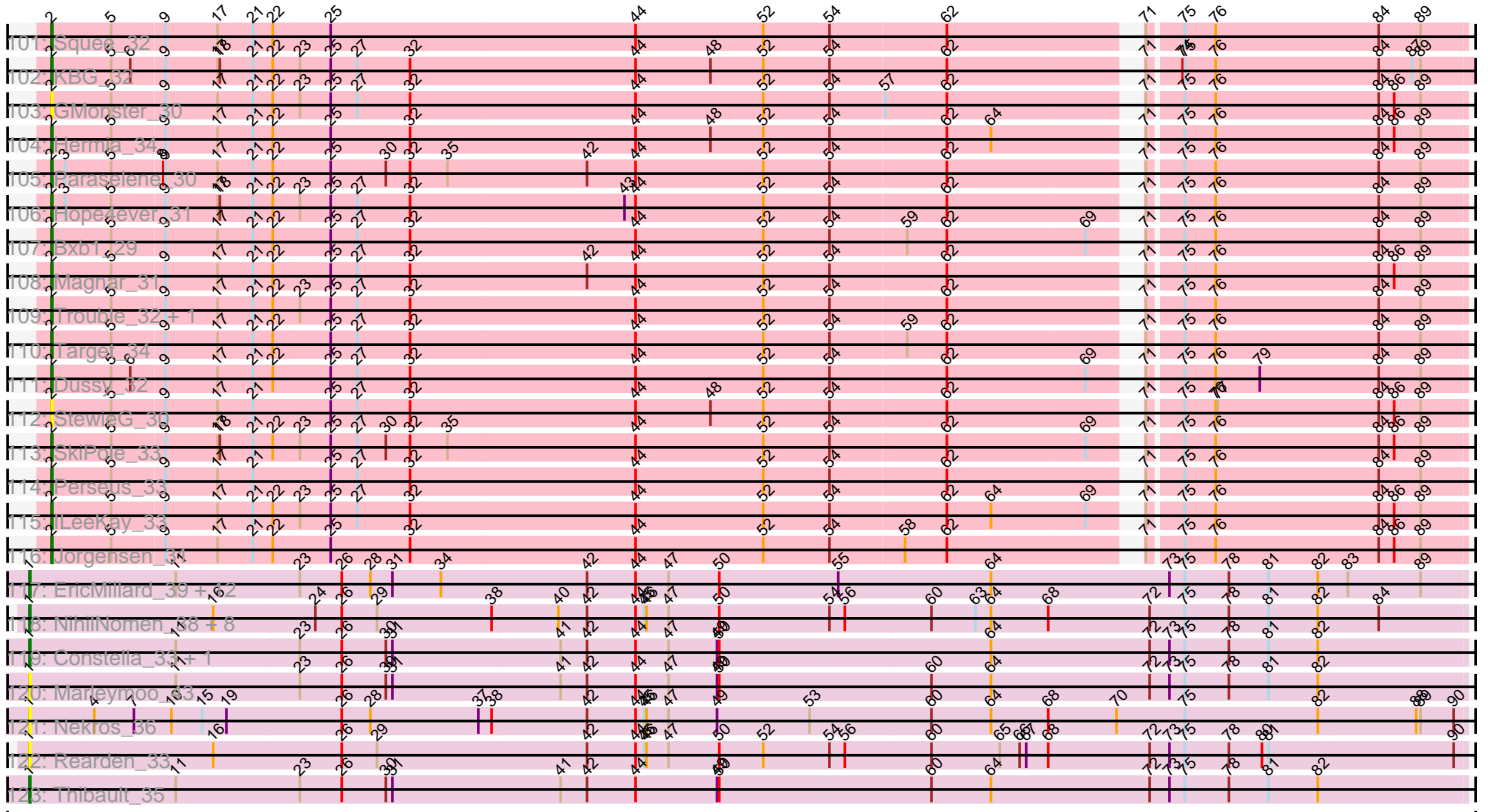


1: Aapeas_33	1	6	0	11	21	26	21	23	4	15	15	02	71	75	70	88	88
2: Sanya_33	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
5: BigPaoli_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
4: Caspicus1_30+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
6: Naira_32+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
6: Sapon_31+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
7: Blue_31+4	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
5: BarrowDipn_30	1	6	0	11	21	22	23	21	30	35	4	15	15	70	70	88	88
9: Paniam_31	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
10: Bigfoot_30	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
11: AnrostMug_31+13	1	6	0	11	21	22	23	21	30	35	4	15	15	70	70	88	88
12: Ringer_31	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
13: Museum_33+3	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
14: BigMad_33	1	6	0	11	21	22	23	21	30	35	4	15	15	70	70	88	88
15: Michley_31	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
16: Maid_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
17: Surprise_31+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
18: PageA_33+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
19: Bus6_33+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
20: Allscum_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
21: Botneron_32+114	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
22: March_30+3	1	6	0	11	21	22	23	21	30	35	4	15	15	70	70	88	88
23: Angel_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
24: Sunshine921_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
25: Sami_33	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
26: IgnatiusPadac_31+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
27: SpikeB_33	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
28: Phabon_32+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
29: Phor_31+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
30: Graduation_33+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
31: Eyebal_31	1	6	0	11	21	22	23	21	30	35	4	15	15	70	70	88	88
32: Snazz_30+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
33: Asp1_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
34: Alstro_35	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
35: Magnif_30+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
36: Rita2_33+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
37: Based_30	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
38: MaskTees_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
39: Pascatang_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
40: Galatia_32+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
41: AbyssZoes_32+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
42: Agne_33+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
43: Dopton_32	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
44: Anonina_31	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
45: Peruja_32+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
46: Queylys_31+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
47: Nyang_30+1	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
48: SwissTees_33+2	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88
49: Petrucio_32	1	6	0	11	21	22	23	21	30	35	4	15	15	70	70	88	88
50: Arcanine_32+3	1	6	0	11	21	22	23	21	4	15	15	02	71	75	70	88	88





Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 210127 Report

This analysis was run 02/22/25 on database version 588.

Pham number 210127 has 255 members, 26 are drafts.

Phages represented in each track:

- Track 1 : Aeneas\_33
- Track 2 : Sanya\_30
- Track 3 : BigPaolini\_32
- Track 4 : Crispicus1\_30, Manatee\_32, Chanagan\_30, Euphoria\_31, DreamCatcher\_34, QTRlifeCrisis\_31, Watermelon\_33, HarryOW\_32, TheloniousMonk\_33, Jasper\_32, DrFeelGood\_30, Atkinbua\_33, Ruotula\_30, Alvin\_32, Dreamboat\_32, Ashballer\_33, Pelly\_32, Niza\_33, Homines\_31, Mkhusele\_32, GrecoEtereo\_33, Wheeler\_31
- Track 5 : Naira\_32, LilBib\_32, Marcell\_31, Marsha\_31, Switzer\_32, Carlyle\_33, MPlant7149\_30, Paphu\_30, Bob3\_30, JC27\_33, Licorice\_33, StrongArm\_30
- Track 6 : Solon\_31, Gyzlar\_33
- Track 7 : Blue\_31, Zephyr\_31, Sumter\_30, MrGordo\_31, Papez\_33
- Track 8 : BarrowTuph\_30
- Track 9 : Parliament\_30
- Track 10 : Bigfoot\_30
- Track 11 : PhrostyMug\_31, Bethlehem\_31, Jerm2\_32, Altman\_33, Norz\_33, Rhynn\_31, Rohr\_32, Oogway\_30, BillKnuckles\_32, McSinger\_32, HermioneGrange\_31, Mule\_31, Kanely\_32, PinkPlastic\_30
- Track 12 : Ringer\_31
- Track 13 : Museum\_33, Seabiscuit\_33, Petp2012\_33, Burton\_32
- Track 14 : BigMau\_33
- Track 15 : Michley\_31
- Track 16 : Raid\_32
- Track 17 : Sorpresa\_31, Big3\_31, Sandaddy\_30
- Track 18 : GageAP\_33, Topgun\_31
- Track 19 : Sibs6\_33, ConceptII\_33, AFIS\_31
- Track 20 : STLscum\_32
- Track 21 : Edtherson\_32, Briton15\_33, Mryolo\_30, Bones\_31, Treddle\_33, Wilkins\_31, Rutherford\_33, JackSparrow\_32, Tripl3t\_32, RidgeCB\_31, McGuire\_32
- Track 22 : Marchy\_30, PhineBark\_31, Levia\_30, Payneful\_31
- Track 23 : Kugel\_32
- Track 24 : Sunshine924\_32
- Track 25 : Hami1\_33
- Track 26 : IgnatiusPatJac\_31, BluSpix\_32
- Track 27 : SpikeBT\_33
- Track 28 : Ichabod\_32, Bigchungji\_31
- Track 29 : Thor\_31, SarFire\_31, Smairt\_32

- Track 30 : Graduation\_33, Phlippers\_30, Beatrix\_31
- Track 31 : Eyeball\_31
- Track 32 : Snazzy\_30, Arlo\_30, Sagefire\_32
- Track 33 : Tasp14\_32
- Track 34 : Alsfro\_35
- Track 35 : Magnito\_30, Turj99\_30
- Track 36 : Pita2\_33, KyMonks1A\_33, PSullivan\_33
- Track 37 : Lesedi\_30
- Track 38 : BeesKnees\_32
- Track 39 : PascalRango\_32
- Track 40 : Agaliana\_32, PacerPaul\_31, Francis47\_31
- Track 41 : Abbyshoes\_32, Kenmech\_34
- Track 42 : Acme\_33, Greg\_33, Fajezeel\_33
- Track 43 : Lopton\_32
- Track 44 : Nhonho\_31
- Track 45 : Nerujay\_32, PherrisBueller\_32
- Track 46 : Cueylyss\_31, HanShotFirst\_31, Dynamix\_32
- Track 47 : Inyanga\_30, Iqorha\_30
- Track 48 : SwissCheese\_33, Forsytheast\_31, Moose\_31
- Track 49 : Petruccio\_32
- Track 50 : Arcanine\_32, Anglerfish\_32, TwoPeat\_32, NEHalo\_31
- Track 51 : Fushigi\_32, Seanderson\_32
- Track 52 : KSSJEB\_31
- Track 53 : EnzoK\_31
- Track 54 : Corvo\_32, MetalQZJ\_31, MaryBeth\_31
- Track 55 : Violet\_30
- Track 56 : Gandalf20\_32
- Track 57 : ProMouse\_30
- Track 58 : Bircsak\_31, Gompeii16\_31, Ajay\_32
- Track 59 : Makemake\_31
- Track 60 : Killigrew\_29
- Track 61 : Pepe\_32
- Track 62 : Marge\_32, Marco3\_31
- Track 63 : A6\_29, BK1\_29
- Track 64 : Buttons\_33
- Track 65 : BaconJack\_34, PattyP\_33
- Track 66 : Applejack\_31
- Track 67 : DD5\_32
- Track 68 : JuliaChild\_33, Molly\_32, Tote\_33, Swole\_33
- Track 69 : Froghopper\_32
- Track 70 : Smeagol\_33
- Track 71 : Adahisdi\_32
- Track 72 : U2\_31
- Track 73 : Espresso\_31
- Track 74 : Kykar\_31, Teodoridan\_29
- Track 75 : Bruns\_30
- Track 76 : LunarLander\_33
- Track 77 : Rufus\_32, Abrogate\_320
- Track 78 : Zeuska\_32
- Track 79 : Doom\_32
- Track 80 : Lockley\_31
- Track 81 : Lamina13\_31, Rubeus\_32
- Track 82 : Traft412\_33

- Track 83 : Ciao\_31
- Track 84 : CactusRose\_30
- Track 85 : Barriga\_31
- Track 86 : Dexes\_32
- Track 87 : BPBiebs31\_32
- Track 88 : Pari\_32
- Track 89 : Dulcie\_30
- Track 90 : Ohno789\_31
- Track 91 : Zeeculate\_31
- Track 92 : Fascinus\_30
- Track 93 : ShortQueendom\_30
- Track 94 : Maroc7\_30
- Track 95 : Monet\_33
- Track 96 : Peterson\_34
- Track 97 : Pippin\_33
- Track 98 : Slagathor\_32
- Track 99 : Pinto\_34
- Track 100 : Gwendoluna\_33
- Track 101 : Squee\_32
- Track 102 : KBG\_32
- Track 103 : GMonster\_30
- Track 104 : Hermia\_34
- Track 105 : Paraselene\_30
- Track 106 : Hope4ever\_31
- Track 107 : Bxb1\_29
- Track 108 : Magnar\_31
- Track 109 : Trouble\_32, Fenn\_32
- Track 110 : Target\_34
- Track 111 : Dussy\_32
- Track 112 : StewieG\_30
- Track 113 : SkiPole\_33
- Track 114 : Perseus\_33
- Track 115 : ILeeKay\_33
- Track 116 : Jorgensen\_31
- Track 117 : EricMillard\_39, JuicyJay\_41, HokkenD\_34, Halley\_39, Klein\_39, Bagrid\_38, Kalah2\_39, Zelink\_40, Phoebus\_38, Redno2\_37, Beem\_39, Dallas\_40, ThreeRngTarjay\_37
- Track 118 : NihilNomen\_38, Dove\_36, Bombitas\_35, Odette\_38, Yeet\_37, Hughesyang\_37, Ejimix\_39, Schatzie\_36, Pound\_40
- Track 119 : Constella\_33, Bobby\_40
- Track 120 : Marleymoo\_43
- Track 121 : Nekros\_36
- Track 122 : Rearden\_33
- Track 123 : Thibault\_35

***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 2, it was called in 206 of the 229 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A6\_29, AFIS\_31, Abbyshoes\_32, Abrogate\_320, Acme\_33, Adahisdi\_32, Aeneas\_33, Agaliana\_32, Ajay\_32, Alsfro\_35, Altman\_33, Alvin\_32, Anglerfish\_32, Applejack\_31, Arcanine\_32, Arlo\_30, Ashballer\_33, Atkinbua\_33, BK1\_29, BPBiabs31\_32, BaconJack\_34, Barriga\_31, BarrowTuph\_30, Beatrix\_31, BeesKnees\_32, Bethlehem\_31, Big3\_31, BigMau\_33, BigPaolini\_32, Bigchungi\_31, Bigfoot\_30, BillKnuckles\_32, Bircsak\_31, BluSpix\_32, Blue\_31, Bob3\_30, Bones\_31, Briton15\_33, Bruns\_30, Burton\_32, Buttons\_33, Bxb1\_29, CactusRose\_30, Carlyle\_33, Chanagan\_30, Ciao\_31, ConceptII\_33, Corvo\_32, Crispicous1\_30, Cueyllyss\_31, DD5\_32, Dexes\_32, Doom\_32, DrFeelGood\_30, DreamCatcher\_34, Dreamboat\_32, Dulcie\_30, Dussy\_32, Dynamix\_32, Edtherson\_32, EnzoK\_31, Espresso\_31, Euphoria\_31, Eyeball\_31, Fajezeel\_33, Fascinus\_30, Fenn\_32, Forsytheast\_31, Francis47\_31, Froghopper\_32, Fushigi\_32, GMonster\_30, GageAP\_33, Gandalf20\_32, Gompeii16\_31, Graduation\_33, GrecoEtereo\_33, Greg\_33, Gwendoluna\_33, Gyzlar\_33, Hami1\_33, HanShotFirst\_31, HarryOW\_32, Hermia\_34, HermioneGrange\_31, Homines\_31, Hope4ever\_31, ILeeKay\_33, Ichabod\_32, IgnatiusPatJac\_31, Inyanga\_30, Iqorha\_30, JC27\_33, JackSparrow\_32, Jasper\_32, Jerm2\_32, Jorgensen\_31, JuliaChild\_33, KBG\_32, KSSJEB\_31, Kanely\_32, Kenmech\_34, Killigrew\_29, Kugel\_32, KyMonks1A\_33, Kykar\_31, Lamina13\_31, Lesedi\_30, Levia\_30, Licorice\_33, LilBib\_32, Lockley\_31, Lopton\_32, LunarLander\_33, MPlant7149\_30, Magnar\_31, Magnito\_30, Makemake\_31, Manatee\_32, Marcell\_31, Marchy\_30, Marco3\_31, Marge\_32, Maroc7\_30, Marsha\_31, MaryBeth\_31, McGuire\_32, McSinger\_32, MetalQZJ\_31, Michley\_31, Mkhusele\_32, Molly\_32, Monet\_33, Moose\_31, MrGordo\_31, Mryolo\_30, Mule\_31, Museum\_33, NEHalo\_31, Naira\_32, Nerujay\_32, Nhonho\_31, Niza\_33, Norz\_33, Ohno789\_31, Oogway\_30, PSullivan\_33, PacerPaul\_31, Papez\_33, Paphu\_30, Paraselene\_30, Pari\_32, Parliament\_30, PascalRango\_32, PattyP\_33, Payneful\_31, Pelly\_32, Pepe\_32, Perseus\_33, Peterson\_34, Petp2012\_33, Petruchio\_32, PherrisBueller\_32, PhineBark\_31, Phlippers\_30, PhrostyMug\_31, PinkPlastic\_30, Pinto\_34, Pippin\_33, Pita2\_33, ProMouse\_30, QTRlifeCrisis\_31, Raid\_32, Rhynn\_31, RidgeCB\_31, Ringer\_31, Rohr\_32, Rubeus\_32, Rufus\_32, Ruotula\_30, Rutherford\_33, STLscum\_32, Sagefire\_32, Sandaddy\_30, Sanya\_30, SarFire\_31, Seabiscuit\_33, Seanderson\_32, ShortQueendom\_30, Sibs6\_33, SkiPole\_33, Slagathor\_32, Smairt\_32, Smeagol\_33, Snazzy\_30, Solon\_31, Sorpresa\_31, SpikeBT\_33, Squee\_32, StewieG\_30, StrongArm\_30, Sumter\_30, Sunshine924\_32, SwissCheese\_33, Switzer\_32, Swole\_33, Target\_34, Tasp14\_32, Teodoridan\_29, TheloniousMonk\_33, Thor\_31, Topgun\_31, Tote\_33, Traft412\_33, Treddle\_33, Tripl3t\_32, Trouble\_32, Turj99\_30, TwoPeat\_32, U2\_31, Violet\_30, Watermelon\_33, Wheeler\_31, Wilkins\_31, Zeeculate\_31, Zephyr\_31, Zeuska\_32,

Genes that have the "Most Annotated" start but do not call it:

- 

Genes that do not have the "Most Annotated" start:

- Bagrid\_38, Beem\_39, Bobby\_40, Bombitas\_35, Constella\_33, Dallas\_40, Dove\_36, Ejimix\_39, EricMillard\_39, Halley\_39, HokkenD\_34, Hughesyang\_37, JuicyJay\_41, Kalah2\_39, Klein\_39, Marleymoo\_43, Nekros\_36, NihilNomen\_38, Odette\_38, Phoebus\_38, Pound\_40, Rearden\_33, Redno2\_37, Schatzie\_36, Thibault\_35, ThreeRngTarjay\_37, Yeet\_37, Zelink\_40,

### Summary by start number:

Start 1:

- Found in 28 of 255 ( 11.0% ) of genes in pham
- Manual Annotations of this start: 23 of 229
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bagrid\_38 (J), Beem\_39 (J), Bobby\_40 (J), Bombitas\_35 (J), Constella\_33 (J), Dallas\_40 (J), Dove\_36 (J), Ejimix\_39 (J), EricMillard\_39 (J), Halley\_39 (J), HokkenD\_34 (J), Hughesyang\_37 (J), JuicyJay\_41 (J), Kalah2\_39 (J), Klein\_39 (J), Marleymoo\_43 (J), Nekros\_36 (J), NihilNomen\_38 (J), Odette\_38 (J), Phoebus\_38 (J), Pound\_40 (J), Rearden\_33 (J), Redno2\_37 (J), Schatzie\_36 (J), Thibault\_35 (J), ThreeRngTarjay\_37 (J), Yeet\_37 (J), Zelink\_40 (J),

#### Start 2:

- Found in 227 of 255 ( 89.0% ) of genes in pham
- Manual Annotations of this start: 206 of 229
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A6\_29 (A1), AFIS\_31 (A1), Abbyshoes\_32 (A1), Abrogate\_320 (A1), Acme\_33 (A1), Adahisdi\_32 (A1), Aeneas\_33 (A1), Agaliana\_32 (A1), Ajay\_32 (A1), Alsfro\_35 (A1), Altman\_33 (A1), Alvin\_32 (A1), Anglerfish\_32 (A1), Applejack\_31 (A1), Arcanine\_32 (A1), Arlo\_30 (A1), Ashballer\_33 (A1), Atkinbua\_33 (A1), BK1\_29 (A1), BPBiebs31\_32 (A1), BaconJack\_34 (A1), Barriga\_31 (A1), BarrowTuph\_30 (A1), Beatrix\_31 (A1), BeesKnees\_32 (A1), Bethlehem\_31 (A1), Big3\_31 (A1), BigMau\_33 (A1), BigPaolini\_32 (A1), Bigchungi\_31 (A1), Bigfoot\_30 (A1), BillKnuckles\_32 (A1), Bircsak\_31 (A1), BluSpix\_32 (A1), Blue\_31 (A1), Bob3\_30 (A1), Bones\_31 (A1), Briton15\_33 (A1), Bruns\_30 (A1), Burton\_32 (A1), Buttons\_33 (A1), Bxb1\_29 (A1), CactusRose\_30 (A1), Carlyle\_33 (A1), Chanagan\_30 (A1), Ciao\_31 (A1), Conceptll\_33 (A1), Corvo\_32 (A1), Crispicous1\_30 (A1), Cueylyss\_31 (A1), DD5\_32 (A1), Dexes\_32 (A1), Doom\_32 (A1), DrFeelGood\_30 (A1), DreamCatcher\_34 (A1), Dreamboat\_32 (A1), Dulcie\_30 (A1), Dussy\_32 (A1), Dynamix\_32 (A1), Edtherson\_32 (A1), EnzoK\_31 (A1), Espresso\_31 (A1), Euphoria\_31 (A1), Eyeball\_31 (A1), Fajezeel\_33 (A1), Fascinus\_30 (A1), Fenn\_32 (A1), Forsytheast\_31 (A1), Francis47\_31 (A1), Froghopper\_32 (A1), Fushigi\_32 (A1), GMonster\_30 (A1), GageAP\_33 (A1), Gandalf20\_32 (A1), Gompeii16\_31 (A1), Graduation\_33 (A1), GrecoEtereo\_33 (A1), Greg\_33 (A1), Gwendoluna\_33 (A1), Gyzlar\_33 (A1), Hami1\_33 (A1), HanShotFirst\_31 (A1), HarryOW\_32 (A1), Hermia\_34 (A1), HermioneGrange\_31 (A1), Homines\_31 (A1), Hope4ever\_31 (A1), ILeeKay\_33 (A1), Ichabod\_32 (A1), IgnatiusPatJac\_31 (A1), Inyanga\_30 (A1), Iqorha\_30 (A1), JC27\_33 (A1), JackSparrow\_32 (A1), Jasper\_32 (A1), Jerm2\_32 (A1), Jorgensen\_31 (A1), JuliaChild\_33 (A1), KBG\_32 (A1), KSSJEB\_31 (A1), Kanely\_32 (A1), Kenmech\_34 (A1), Killigrew\_29 (A1), Kugel\_32 (A1), KyMonks1A\_33 (A1), Kykar\_31 (A1), Lamina13\_31 (A1), Lesedi\_30 (A1), Levia\_30 (A1), Licorice\_33 (A1), LilBib\_32 (A1), Lockley\_31 (A1), Lopton\_32 (A1), LunarLander\_33 (A1), MPlant7149\_30 (A1), Magnar\_31 (A1), Magnito\_30 (A1), Makemake\_31 (A1), Manatee\_32 (A1), Marcell\_31 (A1), Marchy\_30 (A1), Marco3\_31 (A1), Marge\_32 (A1), Maroc7\_30 (A1), Marsha\_31 (A1), MaryBeth\_31 (A1), McGuire\_32 (A1), McSinger\_32 (A1), MetalQZJ\_31 (A1), Michley\_31 (A1), Mkhuseli\_32 (A1), Molly\_32 (A1), Monet\_33 (A1), Moose\_31 (A1), MrGordo\_31 (A1), Mryolo\_30 (A1), Mule\_31 (A1), Museum\_33 (A1), NEHalo\_31 (A1), Naira\_32 (A1), Nerujay\_32 (A1), Nhonho\_31 (A1), Niza\_33 (A1), Norz\_33 (A1), Ohno789\_31 (A1), Oogway\_30 (A1), PSullivan\_33 (A1), PacerPaul\_31 (A1), Papez\_33 (A1), Paphu\_30 (A1), Paraselene\_30 (A1), Pari\_32 (A1), Parliament\_30 (A1), PascalRango\_32 (A1), PattyP\_33 (A1), Payneful\_31 (A1), Pelly\_32 (A1), Pepe\_32 (A1), Perseus\_33 (A1), Peterson\_34 (A1), Petp2012\_33 (A1), Petruccio\_32 (A1), PherrisBueller\_32 (A1), PhineBark\_31 (A1), Phlippers\_30 (A1), PhrostyMug\_31 (A1), PinkPlastic\_30 (A1), Pinto\_34 (A1), Pippin\_33 (A1),



Pita2\_33 (A1), ProMouse\_30 (A1), QTRlifeCrisis\_31 (A1), Raid\_32 (A1), Rhynn\_31 (A1), RidgeCB\_31 (A1), Ringer\_31 (A1), Rohr\_32 (A1), Rubeus\_32 (A1), Rufus\_32 (A1), Ruotula\_30 (A1), Rutherford\_33 (A1), STLscum\_32 (A1), Sagefire\_32 (A1), Sandaddy\_30 (A1), Sanya\_30 (A1), SarFire\_31 (A1), Seabiscuit\_33 (A1), Seanderson\_32 (A1), ShortQueendom\_30 (A1), Sibs6\_33 (A1), SkiPole\_33 (A1), Slagathor\_32 (A1), Smairt\_32 (A1), Smeagol\_33 (A1), Snazzy\_30 (A1), Solon\_31 (A1), Sorpresa\_31 (A1), SpikeBT\_33 (A1), Squee\_32 (A1), StewieG\_30 (A1), StrongArm\_30 (A1), Sumter\_30 (A1), Sunshine924\_32 (A1), SwissCheese\_33 (A1), Switzer\_32 (A1), Swole\_33 (A1), Target\_34 (A1), Tasp14\_32 (A1), Teodoridan\_29 (A1), TheloniousMonk\_33 (A1), Thor\_31 (A1), Topgun\_31 (A1), Tote\_33 (A1), Traft412\_33 (A1), Treddle\_33 (A1), Tripl3t\_32 (A1), Trouble\_32 (A1), Turj99\_30 (A1), TwoPeat\_32 (A1), U2\_31 (A1), Violet\_30 (A1), Watermelon\_33 (A1), Wheeler\_31 (A1), Wilkins\_31 (A1), Zeeculate\_31 (A1), Zephyr\_31 (A1), Zeuska\_32 (A1),

### Summary by clusters:

There are 2 clusters represented in this pham: A1, J,

Info for manual annotations of cluster A1:

- Start number 2 was manually annotated 206 times for cluster A1.

Info for manual annotations of cluster J:

- Start number 1 was manually annotated 23 times for cluster J.

### Gene Information:

Gene: A6\_29 Start: 23660, Stop: 25513, Start Num: 2

Candidate Starts for A6\_29:

(Start: 2 @23660 has 206 MA's), (5, 23741), (9, 23807), (17, 23876), (21, 23924), (22, 23951), (25, 24029), (27, 24065), (44, 24443), (52, 24617), (54, 24704), (62, 24860), (71, 25091), (75, 25133), (76, 25175), (84, 25397), (86, 25418), (89, 25454),

Gene: AFIS\_31 Start: 24203, Stop: 26056, Start Num: 2

Candidate Starts for AFIS\_31:

(Start: 2 @24203 has 206 MA's), (5, 24284), (9, 24350), (17, 24419), (21, 24467), (22, 24494), (25, 24572), (27, 24608), (32, 24680), (44, 24986), (52, 25160), (54, 25247), (62, 25403), (69, 25589), (71, 25634), (75, 25676), (76, 25718), (84, 25940), (86, 25961), (89, 25997),

Gene: Abbyshoes\_32 Start: 24318, Stop: 26171, Start Num: 2

Candidate Starts for Abbyshoes\_32:

(Start: 2 @24318 has 206 MA's), (3, 24336), (5, 24399), (9, 24465), (17, 24534), (18, 24537), (21, 24582), (22, 24609), (25, 24687), (27, 24723), (32, 24795), (44, 25101), (52, 25275), (54, 25362), (62, 25518), (69, 25704), (71, 25749), (75, 25791), (76, 25833), (79, 25893), (84, 26055), (89, 26112),

Gene: Abrogate\_320 Start: 24878, Stop: 26731, Start Num: 2

Candidate Starts for Abrogate\_320:

(Start: 2 @24878 has 206 MA's), (3, 24896), (5, 24959), (9, 25025), (17, 25094), (21, 25142), (22, 25169), (25, 25247), (27, 25283), (32, 25355), (44, 25661), (52, 25835), (54, 25922), (62, 26078), (71, 26309), (75, 26351), (76, 26393), (84, 26615), (89, 26672),

Gene: Acme\_33 Start: 24419, Stop: 26272, Start Num: 2

Candidate Starts for Acme\_33:

(Start: 2 @24419 has 206 MA's), (5, 24500), (9, 24566), (17, 24635), (21, 24683), (22, 24710), (25, 24788), (27, 24824), (44, 25202), (52, 25376), (54, 25463), (62, 25619), (71, 25850), (75, 25892), (76, 25934), (84, 26156), (89, 26213),

Gene: Adahisdi\_32 Start: 24279, Stop: 26132, Start Num: 2

Candidate Starts for Adahisdi\_32:

(Start: 2 @24279 has 206 MA's), (5, 24360), (9, 24426), (17, 24495), (21, 24543), (22, 24570), (25, 24648), (27, 24684), (32, 24756), (44, 25062), (52, 25236), (54, 25323), (62, 25479), (64, 25539), (69, 25665), (71, 25710), (75, 25752), (76, 25794), (79, 25854), (84, 26016), (89, 26073),

Gene: Aeneas\_33 Start: 24455, Stop: 26308, Start Num: 2

Candidate Starts for Aeneas\_33:

(Start: 2 @24455 has 206 MA's), (5, 24536), (9, 24602), (17, 24671), (21, 24719), (25, 24824), (27, 24860), (32, 24932), (44, 25238), (52, 25412), (54, 25499), (62, 25655), (71, 25886), (75, 25928), (76, 25970), (84, 26192), (86, 26213), (89, 26249),

Gene: Agaliana\_32 Start: 24399, Stop: 26252, Start Num: 2

Candidate Starts for Agaliana\_32:

(Start: 2 @24399 has 206 MA's), (5, 24480), (9, 24546), (17, 24615), (21, 24663), (22, 24690), (23, 24726), (25, 24768), (27, 24804), (32, 24876), (44, 25182), (48, 25284), (52, 25356), (54, 25443), (62, 25599), (71, 25830), (74, 25869), (75, 25872), (76, 25914), (84, 26136), (86, 26157), (89, 26193),

Gene: Ajay\_32 Start: 24631, Stop: 26484, Start Num: 2

Candidate Starts for Ajay\_32:

(Start: 2 @24631 has 206 MA's), (5, 24712), (6, 24736), (9, 24778), (17, 24847), (21, 24895), (22, 24922), (23, 24958), (25, 25000), (27, 25036), (32, 25108), (44, 25414), (48, 25516), (52, 25588), (54, 25675), (62, 25831), (71, 26062), (74, 26101), (75, 26104), (76, 26146), (84, 26368), (86, 26389), (89, 26425),

Gene: Alsfro\_35 Start: 24864, Stop: 26717, Start Num: 2

Candidate Starts for Alsfro\_35:

(Start: 2 @24864 has 206 MA's), (3, 24882), (5, 24945), (9, 25011), (17, 25080), (18, 25083), (21, 25128), (22, 25155), (23, 25191), (25, 25233), (27, 25269), (32, 25341), (43, 25632), (44, 25647), (52, 25821), (54, 25908), (62, 26064), (69, 26250), (71, 26295), (74, 26334), (75, 26337), (76, 26379), (84, 26601), (86, 26622), (89, 26658),

Gene: Altman\_33 Start: 24922, Stop: 26775, Start Num: 2

Candidate Starts for Altman\_33:

(Start: 2 @24922 has 206 MA's), (5, 25003), (9, 25069), (17, 25138), (21, 25186), (22, 25213), (25, 25291), (27, 25327), (32, 25399), (44, 25705), (52, 25879), (54, 25966), (62, 26122), (71, 26353), (75, 26395), (76, 26437), (84, 26659), (86, 26680), (89, 26716),

Gene: Alvin\_32 Start: 24691, Stop: 26544, Start Num: 2

Candidate Starts for Alvin\_32:

(Start: 2 @24691 has 206 MA's), (5, 24772), (9, 24838), (17, 24907), (21, 24955), (22, 24982), (25, 25060), (27, 25096), (32, 25168), (44, 25474), (52, 25648), (54, 25735), (62, 25891), (69, 26077), (71, 26122), (75, 26164), (76, 26206), (84, 26428), (89, 26485),

Gene: Anglerfish\_32 Start: 24835, Stop: 26688, Start Num: 2

Candidate Starts for Anglerfish\_32:

(Start: 2 @24835 has 206 MA's), (5, 24916), (9, 24982), (17, 25051), (21, 25099), (22, 25126), (25, 25204), (27, 25240), (30, 25279), (32, 25312), (35, 25363), (44, 25618), (52, 25792), (54, 25879), (62,

26035), (69, 26221), (71, 26266), (75, 26308), (76, 26350), (84, 26572), (86, 26593), (89, 26629),

Gene: Applejack\_31 Start: 24096, Stop: 25949, Start Num: 2

Candidate Starts for Applejack\_31:

(Start: 2 @24096 has 206 MA's), (5, 24177), (9, 24243), (17, 24312), (21, 24360), (22, 24387), (25, 24465), (27, 24501), (30, 24540), (32, 24573), (35, 24624), (44, 24879), (52, 25053), (54, 25140), (62, 25296), (64, 25356), (71, 25527), (75, 25569), (76, 25611), (84, 25833), (89, 25890),

Gene: Arcanine\_32 Start: 23849, Stop: 25702, Start Num: 2

Candidate Starts for Arcanine\_32:

(Start: 2 @23849 has 206 MA's), (5, 23930), (9, 23996), (17, 24065), (21, 24113), (22, 24140), (25, 24218), (27, 24254), (30, 24293), (32, 24326), (35, 24377), (44, 24632), (52, 24806), (54, 24893), (62, 25049), (69, 25235), (71, 25280), (75, 25322), (76, 25364), (84, 25586), (86, 25607), (89, 25643),

Gene: Arlo\_30 Start: 23725, Stop: 25578, Start Num: 2

Candidate Starts for Arlo\_30:

(Start: 2 @23725 has 206 MA's), (5, 23806), (9, 23872), (17, 23941), (21, 23989), (22, 24016), (25, 24094), (27, 24130), (30, 24169), (32, 24202), (35, 24253), (44, 24508), (52, 24682), (54, 24769), (62, 24925), (71, 25156), (75, 25198), (76, 25240), (84, 25462), (89, 25519),

Gene: Ashballer\_33 Start: 24849, Stop: 26702, Start Num: 2

Candidate Starts for Ashballer\_33:

(Start: 2 @24849 has 206 MA's), (5, 24930), (9, 24996), (17, 25065), (21, 25113), (22, 25140), (25, 25218), (27, 25254), (32, 25326), (44, 25632), (52, 25806), (54, 25893), (62, 26049), (69, 26235), (71, 26280), (75, 26322), (76, 26364), (84, 26586), (89, 26643),

Gene: Atkinbua\_33 Start: 24549, Stop: 26402, Start Num: 2

Candidate Starts for Atkinbua\_33:

(Start: 2 @24549 has 206 MA's), (5, 24630), (9, 24696), (17, 24765), (21, 24813), (22, 24840), (25, 24918), (27, 24954), (32, 25026), (44, 25332), (52, 25506), (54, 25593), (62, 25749), (69, 25935), (71, 25980), (75, 26022), (76, 26064), (84, 26286), (89, 26343),

Gene: BK1\_29 Start: 23660, Stop: 25513, Start Num: 2

Candidate Starts for BK1\_29:

(Start: 2 @23660 has 206 MA's), (5, 23741), (9, 23807), (17, 23876), (21, 23924), (22, 23951), (25, 24029), (27, 24065), (44, 24443), (52, 24617), (54, 24704), (62, 24860), (71, 25091), (75, 25133), (76, 25175), (84, 25397), (86, 25418), (89, 25454),

Gene: BPBiebs31\_32 Start: 24420, Stop: 26273, Start Num: 2

Candidate Starts for BPBiebs31\_32:

(Start: 2 @24420 has 206 MA's), (5, 24501), (9, 24567), (17, 24636), (21, 24684), (22, 24711), (23, 24747), (25, 24789), (27, 24825), (32, 24897), (44, 25203), (48, 25305), (52, 25377), (54, 25464), (62, 25620), (64, 25680), (69, 25806), (71, 25851), (75, 25893), (76, 25935), (84, 26157), (86, 26178), (89, 26214),

Gene: BaconJack\_34 Start: 24618, Stop: 26471, Start Num: 2

Candidate Starts for BaconJack\_34:

(Start: 2 @24618 has 206 MA's), (5, 24699), (9, 24765), (17, 24834), (21, 24882), (22, 24909), (23, 24945), (25, 24987), (27, 25023), (32, 25095), (44, 25401), (48, 25503), (52, 25575), (54, 25662), (62, 25818), (71, 26049), (75, 26091), (76, 26133), (84, 26355), (89, 26412),

Gene: Bagrid\_38 Start: 29660, Stop: 31588, Start Num: 1

Candidate Starts for Bagrid\_38:

(Start: 1 @29660 has 23 MA's), (11, 29855), (23, 30023), (26, 30080), (28, 30119), (31, 30149), (34, 30215), (42, 30413), (44, 30479), (47, 30524), (50, 30584), (55, 30743), (64, 30950), (73, 31193), (75, 31214), (78, 31274), (81, 31328), (82, 31394), (83, 31433), (89, 31532),

Gene: Barriga\_31 Start: 23951, Stop: 25804, Start Num: 2

Candidate Starts for Barriga\_31:

(Start: 2 @23951 has 206 MA's), (5, 24032), (9, 24098), (17, 24167), (21, 24215), (22, 24242), (25, 24320), (27, 24356), (44, 24734), (49, 24845), (52, 24908), (54, 24995), (62, 25151), (71, 25382), (75, 25424), (76, 25466), (84, 25688), (86, 25709), (89, 25745),

Gene: BarrowTuph\_30 Start: 23972, Stop: 25813, Start Num: 2

Candidate Starts for BarrowTuph\_30:

(Start: 2 @23972 has 206 MA's), (5, 24053), (9, 24119), (17, 24188), (21, 24236), (22, 24263), (23, 24299), (25, 24341), (27, 24377), (32, 24449), (44, 24755), (52, 24929), (54, 25016), (60, 25151), (62, 25172), (71, 25403), (75, 25445), (76, 25487), (89, 25754),

Gene: Beatrix\_31 Start: 25533, Stop: 27386, Start Num: 2

Candidate Starts for Beatrix\_31:

(Start: 2 @25533 has 206 MA's), (5, 25614), (9, 25680), (17, 25749), (18, 25752), (21, 25797), (22, 25824), (23, 25860), (25, 25902), (27, 25938), (32, 26010), (44, 26316), (52, 26490), (54, 26577), (62, 26733), (71, 26964), (75, 27006), (76, 27048), (84, 27270), (86, 27291), (89, 27327),

Gene: Beem\_39 Start: 30226, Stop: 32154, Start Num: 1

Candidate Starts for Beem\_39:

(Start: 1 @30226 has 23 MA's), (11, 30421), (23, 30589), (26, 30646), (28, 30685), (31, 30715), (34, 30781), (42, 30979), (44, 31045), (47, 31090), (50, 31150), (55, 31309), (64, 31516), (73, 31759), (75, 31780), (78, 31840), (81, 31894), (82, 31960), (83, 31999), (89, 32098),

Gene: BeesKnees\_32 Start: 24150, Stop: 26003, Start Num: 2

Candidate Starts for BeesKnees\_32:

(Start: 2 @24150 has 206 MA's), (3, 24168), (5, 24231), (9, 24297), (17, 24366), (21, 24414), (22, 24441), (23, 24477), (25, 24519), (27, 24555), (32, 24627), (44, 24933), (52, 25107), (54, 25194), (62, 25350), (69, 25536), (71, 25581), (75, 25623), (76, 25665), (84, 25887), (89, 25944),

Gene: Bethlehem\_31 Start: 25376, Stop: 27229, Start Num: 2

Candidate Starts for Bethlehem\_31:

(Start: 2 @25376 has 206 MA's), (5, 25457), (9, 25523), (17, 25592), (21, 25640), (22, 25667), (25, 25745), (27, 25781), (32, 25853), (44, 26159), (52, 26333), (54, 26420), (62, 26576), (71, 26807), (75, 26849), (76, 26891), (84, 27113), (86, 27134), (89, 27170),

Gene: Big3\_31 Start: 24731, Stop: 26584, Start Num: 2

Candidate Starts for Big3\_31:

(Start: 2 @24731 has 206 MA's), (5, 24812), (9, 24878), (17, 24947), (21, 24995), (22, 25022), (25, 25100), (32, 25208), (44, 25514), (52, 25688), (54, 25775), (62, 25931), (69, 26117), (71, 26162), (75, 26204), (76, 26246), (84, 26468), (86, 26489), (89, 26525),

Gene: BigMau\_33 Start: 24285, Stop: 26138, Start Num: 2

Candidate Starts for BigMau\_33:

(Start: 2 @24285 has 206 MA's), (5, 24366), (9, 24432), (17, 24501), (21, 24549), (22, 24576), (25, 24654), (27, 24690), (32, 24762), (44, 25068), (52, 25242), (54, 25329), (62, 25485), (71, 25716), (75, 25758), (76, 25800), (79, 25860), (84, 26022), (89, 26079),

Gene: BigPaolini\_32 Start: 24729, Stop: 26582, Start Num: 2

Candidate Starts for BigPaolini\_32:

(Start: 2 @24729 has 206 MA's), (5, 24810), (6, 24834), (9, 24876), (17, 24945), (21, 24993), (22, 25020), (23, 25056), (25, 25098), (32, 25206), (44, 25512), (52, 25686), (54, 25773), (62, 25929), (71, 26160), (75, 26202), (76, 26244), (84, 26466), (87, 26511), (89, 26523),

Gene: Bigchungj\_31 Start: 24102, Stop: 25955, Start Num: 2

Candidate Starts for Bigchungj\_31:

(Start: 2 @24102 has 206 MA's), (5, 24183), (9, 24249), (17, 24318), (21, 24366), (22, 24393), (23, 24429), (25, 24471), (27, 24507), (32, 24579), (44, 24885), (48, 24987), (52, 25059), (54, 25146), (62, 25302), (64, 25362), (71, 25533), (75, 25575), (76, 25617), (84, 25839), (89, 25896),

Gene: Bigfoot\_30 Start: 23891, Stop: 25744, Start Num: 2

Candidate Starts for Bigfoot\_30:

(Start: 2 @23891 has 206 MA's), (5, 23972), (9, 24038), (17, 24107), (18, 24110), (21, 24155), (22, 24182), (25, 24260), (27, 24296), (32, 24368), (44, 24674), (52, 24848), (54, 24935), (62, 25091), (69, 25277), (71, 25322), (75, 25364), (76, 25406), (84, 25628), (89, 25685),

Gene: BillKnuckles\_32 Start: 24816, Stop: 26669, Start Num: 2

Candidate Starts for BillKnuckles\_32:

(Start: 2 @24816 has 206 MA's), (5, 24897), (9, 24963), (17, 25032), (21, 25080), (22, 25107), (25, 25185), (27, 25221), (32, 25293), (44, 25599), (52, 25773), (54, 25860), (62, 26016), (71, 26247), (75, 26289), (76, 26331), (84, 26553), (86, 26574), (89, 26610),

Gene: Bircsak\_31 Start: 24588, Stop: 26441, Start Num: 2

Candidate Starts for Bircsak\_31:

(Start: 2 @24588 has 206 MA's), (5, 24669), (6, 24693), (9, 24735), (17, 24804), (21, 24852), (22, 24879), (23, 24915), (25, 24957), (27, 24993), (32, 25065), (44, 25371), (48, 25473), (52, 25545), (54, 25632), (62, 25788), (71, 26019), (74, 26058), (75, 26061), (76, 26103), (84, 26325), (86, 26346), (89, 26382),

Gene: BluSpix\_32 Start: 24346, Stop: 26199, Start Num: 2

Candidate Starts for BluSpix\_32:

(Start: 2 @24346 has 206 MA's), (3, 24364), (5, 24427), (9, 24493), (17, 24562), (18, 24565), (21, 24610), (22, 24637), (23, 24673), (25, 24715), (27, 24751), (32, 24823), (44, 25129), (52, 25303), (54, 25390), (62, 25546), (64, 25606), (71, 25777), (75, 25819), (76, 25861), (84, 26083), (86, 26104), (89, 26140),

Gene: Blue\_31 Start: 24584, Stop: 26437, Start Num: 2

Candidate Starts for Blue\_31:

(Start: 2 @24584 has 206 MA's), (5, 24665), (9, 24731), (17, 24800), (21, 24848), (22, 24875), (25, 24953), (32, 25061), (44, 25367), (52, 25541), (54, 25628), (62, 25784), (69, 25970), (71, 26015), (75, 26057), (76, 26099), (84, 26321), (89, 26378),

Gene: Bob3\_30 Start: 23625, Stop: 25478, Start Num: 2

Candidate Starts for Bob3\_30:

(Start: 2 @23625 has 206 MA's), (5, 23706), (9, 23772), (17, 23841), (21, 23889), (22, 23916), (25, 23994), (27, 24030), (32, 24102), (44, 24408), (52, 24582), (54, 24669), (62, 24825), (71, 25056), (75, 25098), (76, 25140), (84, 25362), (89, 25419),

Gene: Bobby\_40 Start: 31067, Stop: 32995, Start Num: 1

Candidate Starts for Bobby\_40:

(Start: 1 @31067 has 23 MA's), (11, 31262), (23, 31430), (26, 31487), (30, 31547), (31, 31556), (41, 31784), (42, 31820), (44, 31886), (47, 31931), (49, 31988), (50, 31991), (64, 32357), (72, 32573), (73,

32600), (75, 32621), (78, 32681), (81, 32735), (82, 32801),

Gene: Bombitas\_35 Start: 29250, Stop: 31178, Start Num: 1

Candidate Starts for Bombitas\_35:

(Start: 1 @29250 has 23 MA's), (16, 29496), (24, 29634), (26, 29670), (29, 29718), (38, 29874), (40, 29964), (42, 30003), (44, 30069), (45, 30081), (46, 30084), (47, 30114), (50, 30174), (54, 30321), (56, 30342), (60, 30459), (63, 30519), (64, 30540), (68, 30618), (72, 30756), (75, 30804), (78, 30864), (81, 30918), (82, 30984), (84, 31065),

Gene: Bones\_31 Start: 23991, Stop: 25844, Start Num: 2

Candidate Starts for Bones\_31:

(Start: 2 @23991 has 206 MA's), (5, 24072), (9, 24138), (17, 24207), (21, 24255), (22, 24282), (23, 24318), (25, 24360), (27, 24396), (32, 24468), (44, 24774), (52, 24948), (54, 25035), (62, 25191), (69, 25377), (71, 25422), (75, 25464), (76, 25506), (84, 25728), (89, 25785),

Gene: Briton15\_33 Start: 24383, Stop: 26236, Start Num: 2

Candidate Starts for Briton15\_33:

(Start: 2 @24383 has 206 MA's), (5, 24464), (9, 24530), (17, 24599), (21, 24647), (22, 24674), (23, 24710), (25, 24752), (27, 24788), (32, 24860), (44, 25166), (52, 25340), (54, 25427), (62, 25583), (69, 25769), (71, 25814), (75, 25856), (76, 25898), (84, 26120), (89, 26177),

Gene: Bruns\_30 Start: 24013, Stop: 25866, Start Num: 2

Candidate Starts for Bruns\_30:

(Start: 2 @24013 has 206 MA's), (5, 24094), (9, 24160), (17, 24229), (18, 24232), (21, 24277), (22, 24304), (23, 24340), (25, 24382), (27, 24418), (32, 24490), (44, 24796), (52, 24970), (54, 25057), (62, 25213), (64, 25273), (69, 25399), (71, 25444), (75, 25486), (76, 25528), (84, 25750), (86, 25771), (89, 25807),

Gene: Burton\_32 Start: 24233, Stop: 26086, Start Num: 2

Candidate Starts for Burton\_32:

(Start: 2 @24233 has 206 MA's), (5, 24314), (9, 24380), (17, 24449), (21, 24497), (22, 24524), (23, 24560), (25, 24602), (27, 24638), (32, 24710), (44, 25016), (48, 25118), (52, 25190), (54, 25277), (62, 25433), (71, 25664), (75, 25706), (76, 25748), (84, 25970), (86, 25991), (89, 26027),

Gene: Buttons\_33 Start: 25074, Stop: 26927, Start Num: 2

Candidate Starts for Buttons\_33:

(Start: 2 @25074 has 206 MA's), (5, 25155), (9, 25221), (17, 25290), (21, 25338), (22, 25365), (25, 25443), (27, 25479), (44, 25857), (52, 26031), (54, 26118), (62, 26274), (64, 26334), (71, 26505), (75, 26547), (76, 26589), (84, 26811), (89, 26868),

Gene: Bxb1\_29 Start: 24184, Stop: 26037, Start Num: 2

Candidate Starts for Bxb1\_29:

(Start: 2 @24184 has 206 MA's), (5, 24265), (9, 24331), (17, 24400), (21, 24448), (22, 24475), (25, 24553), (27, 24589), (32, 24661), (44, 24967), (52, 25141), (54, 25228), (59, 25330), (62, 25384), (69, 25570), (71, 25615), (75, 25657), (76, 25699), (84, 25921), (89, 25978),

Gene: CactusRose\_30 Start: 23986, Stop: 25839, Start Num: 2

Candidate Starts for CactusRose\_30:

(Start: 2 @23986 has 206 MA's), (5, 24067), (9, 24133), (17, 24202), (18, 24205), (21, 24250), (22, 24277), (23, 24313), (25, 24355), (27, 24391), (32, 24463), (44, 24769), (52, 24943), (54, 25030), (62, 25186), (64, 25246), (69, 25372), (71, 25417), (75, 25459), (76, 25501), (84, 25723), (89, 25780),

Gene: Carlyle\_33 Start: 24913, Stop: 26766, Start Num: 2

Candidate Starts for Carlyle\_33:

(Start: 2 @24913 has 206 MA's), (5, 24994), (9, 25060), (17, 25129), (21, 25177), (22, 25204), (25, 25282), (27, 25318), (32, 25390), (44, 25696), (52, 25870), (54, 25957), (62, 26113), (71, 26344), (75, 26386), (76, 26428), (84, 26650), (89, 26707),

Gene: Chanagan\_30 Start: 23698, Stop: 25551, Start Num: 2

Candidate Starts for Chanagan\_30:

(Start: 2 @23698 has 206 MA's), (5, 23779), (9, 23845), (17, 23914), (21, 23962), (22, 23989), (25, 24067), (27, 24103), (32, 24175), (44, 24481), (52, 24655), (54, 24742), (62, 24898), (69, 25084), (71, 25129), (75, 25171), (76, 25213), (84, 25435), (89, 25492),

Gene: Ciao\_31 Start: 24041, Stop: 25894, Start Num: 2

Candidate Starts for Ciao\_31:

(Start: 2 @24041 has 206 MA's), (5, 24122), (9, 24188), (17, 24257), (21, 24305), (22, 24332), (25, 24410), (27, 24446), (32, 24518), (44, 24824), (52, 24998), (54, 25085), (62, 25241), (64, 25301), (65, 25313), (71, 25472), (75, 25514), (76, 25556), (84, 25778), (89, 25835),

Gene: Conceptll\_33 Start: 25055, Stop: 26908, Start Num: 2

Candidate Starts for Conceptll\_33:

(Start: 2 @25055 has 206 MA's), (5, 25136), (9, 25202), (17, 25271), (21, 25319), (22, 25346), (25, 25424), (27, 25460), (32, 25532), (44, 25838), (52, 26012), (54, 26099), (62, 26255), (69, 26441), (71, 26486), (75, 26528), (76, 26570), (84, 26792), (86, 26813), (89, 26849),

Gene: Constella\_33 Start: 29013, Stop: 30941, Start Num: 1

Candidate Starts for Constella\_33:

(Start: 1 @29013 has 23 MA's), (11, 29208), (23, 29376), (26, 29433), (30, 29493), (31, 29502), (41, 29730), (42, 29766), (44, 29832), (47, 29877), (49, 29934), (50, 29937), (64, 30303), (72, 30519), (73, 30546), (75, 30567), (78, 30627), (81, 30681), (82, 30747),

Gene: Corvo\_32 Start: 25050, Stop: 26903, Start Num: 2

Candidate Starts for Corvo\_32:

(Start: 2 @25050 has 206 MA's), (5, 25131), (6, 25155), (9, 25197), (17, 25266), (21, 25314), (22, 25341), (23, 25377), (25, 25419), (27, 25455), (32, 25527), (44, 25833), (52, 26007), (54, 26094), (62, 26250), (64, 26310), (69, 26436), (71, 26481), (75, 26523), (76, 26565), (84, 26787), (89, 26844),

Gene: Crispicous1\_30 Start: 23627, Stop: 25480, Start Num: 2

Candidate Starts for Crispicous1\_30:

(Start: 2 @23627 has 206 MA's), (5, 23708), (9, 23774), (17, 23843), (21, 23891), (22, 23918), (25, 23996), (27, 24032), (32, 24104), (44, 24410), (52, 24584), (54, 24671), (62, 24827), (69, 25013), (71, 25058), (75, 25100), (76, 25142), (84, 25364), (89, 25421),

Gene: Cueyllyss\_31 Start: 24224, Stop: 26077, Start Num: 2

Candidate Starts for Cueyllyss\_31:

(Start: 2 @24224 has 206 MA's), (5, 24305), (9, 24371), (17, 24440), (21, 24488), (22, 24515), (23, 24551), (25, 24593), (27, 24629), (32, 24701), (44, 25007), (52, 25181), (54, 25268), (62, 25424), (71, 25655), (75, 25697), (76, 25739), (84, 25961), (86, 25982), (89, 26018),

Gene: DD5\_32 Start: 24817, Stop: 26670, Start Num: 2

Candidate Starts for DD5\_32:

(Start: 2 @24817 has 206 MA's), (3, 24835), (5, 24898), (9, 24964), (17, 25033), (18, 25036), (21, 25081), (22, 25108), (23, 25144), (25, 25186), (27, 25222), (32, 25294), (44, 25600), (48, 25702), (52, 25774), (54, 25861), (62, 26017), (69, 26203), (71, 26248), (75, 26290), (76, 26332), (84, 26554), (89, 26611),

Gene: Dallas\_40 Start: 29751, Stop: 31679, Start Num: 1

Candidate Starts for Dallas\_40:

(Start: 1 @29751 has 23 MA's), (11, 29946), (23, 30114), (26, 30171), (28, 30210), (31, 30240), (34, 30306), (42, 30504), (44, 30570), (47, 30615), (50, 30675), (55, 30834), (64, 31041), (73, 31284), (75, 31305), (78, 31365), (81, 31419), (82, 31485), (83, 31524), (89, 31623),

Gene: Dexes\_32 Start: 24779, Stop: 26632, Start Num: 2

Candidate Starts for Dexes\_32:

(Start: 2 @24779 has 206 MA's), (5, 24860), (6, 24884), (9, 24926), (17, 24995), (21, 25043), (22, 25070), (25, 25148), (27, 25184), (32, 25256), (44, 25562), (52, 25736), (54, 25823), (62, 25979), (69, 26165), (71, 26210), (75, 26252), (76, 26294), (84, 26516), (86, 26537), (89, 26573),

Gene: Doom\_32 Start: 24887, Stop: 26740, Start Num: 2

Candidate Starts for Doom\_32:

(Start: 2 @24887 has 206 MA's), (5, 24968), (9, 25034), (17, 25103), (18, 25106), (21, 25151), (22, 25178), (23, 25214), (25, 25256), (27, 25292), (32, 25364), (44, 25670), (52, 25844), (54, 25931), (59, 26033), (62, 26087), (69, 26273), (71, 26318), (75, 26360), (76, 26402), (84, 26624), (89, 26681),

Gene: Dove\_36 Start: 29249, Stop: 31177, Start Num: 1

Candidate Starts for Dove\_36:

(Start: 1 @29249 has 23 MA's), (16, 29495), (24, 29633), (26, 29669), (29, 29717), (38, 29873), (40, 29963), (42, 30002), (44, 30068), (45, 30080), (46, 30083), (47, 30113), (50, 30173), (54, 30320), (56, 30341), (60, 30458), (63, 30518), (64, 30539), (68, 30617), (72, 30755), (75, 30803), (78, 30863), (81, 30917), (82, 30983), (84, 31064),

Gene: DrFeelGood\_30 Start: 24490, Stop: 26343, Start Num: 2

Candidate Starts for DrFeelGood\_30:

(Start: 2 @24490 has 206 MA's), (5, 24571), (9, 24637), (17, 24706), (21, 24754), (22, 24781), (25, 24859), (27, 24895), (32, 24967), (44, 25273), (52, 25447), (54, 25534), (62, 25690), (69, 25876), (71, 25921), (75, 25963), (76, 26005), (84, 26227), (89, 26284),

Gene: DreamCatcher\_34 Start: 25457, Stop: 27310, Start Num: 2

Candidate Starts for DreamCatcher\_34:

(Start: 2 @25457 has 206 MA's), (5, 25538), (9, 25604), (17, 25673), (21, 25721), (22, 25748), (25, 25826), (27, 25862), (32, 25934), (44, 26240), (52, 26414), (54, 26501), (62, 26657), (69, 26843), (71, 26888), (75, 26930), (76, 26972), (84, 27194), (89, 27251),

Gene: Dreamboat\_32 Start: 24056, Stop: 25909, Start Num: 2

Candidate Starts for Dreamboat\_32:

(Start: 2 @24056 has 206 MA's), (5, 24137), (9, 24203), (17, 24272), (21, 24320), (22, 24347), (25, 24425), (27, 24461), (32, 24533), (44, 24839), (52, 25013), (54, 25100), (62, 25256), (69, 25442), (71, 25487), (75, 25529), (76, 25571), (84, 25793), (89, 25850),

Gene: Dulcie\_30 Start: 23753, Stop: 25606, Start Num: 2

Candidate Starts for Dulcie\_30:

(Start: 2 @23753 has 206 MA's), (5, 23834), (9, 23900), (17, 23969), (20, 23993), (21, 24017), (22, 24044), (25, 24122), (27, 24158), (30, 24197), (32, 24230), (35, 24281), (44, 24536), (52, 24710), (54, 24797), (62, 24953), (71, 25184), (75, 25226), (76, 25268), (84, 25490), (89, 25547),

Gene: Dussy\_32 Start: 24318, Stop: 26171, Start Num: 2

Candidate Starts for Dussy\_32:



(Start: 2 @24318 has 206 MA's), (5, 24399), (6, 24423), (9, 24465), (17, 24534), (21, 24582), (22, 24609), (25, 24687), (27, 24723), (32, 24795), (44, 25101), (52, 25275), (54, 25362), (62, 25518), (69, 25704), (71, 25749), (75, 25791), (76, 25833), (79, 25893), (84, 26055), (89, 26112),

Gene: Dynamix\_32 Start: 24135, Stop: 25988, Start Num: 2

Candidate Starts for Dynamix\_32:

(Start: 2 @24135 has 206 MA's), (5, 24216), (9, 24282), (17, 24351), (21, 24399), (22, 24426), (23, 24462), (25, 24504), (27, 24540), (32, 24612), (44, 24918), (52, 25092), (54, 25179), (62, 25335), (71, 25566), (75, 25608), (76, 25650), (84, 25872), (86, 25893), (89, 25929),

Gene: Edtherson\_32 Start: 24835, Stop: 26688, Start Num: 2

Candidate Starts for Edtherson\_32:

(Start: 2 @24835 has 206 MA's), (5, 24916), (9, 24982), (17, 25051), (21, 25099), (22, 25126), (23, 25162), (25, 25204), (27, 25240), (32, 25312), (44, 25618), (52, 25792), (54, 25879), (62, 26035), (69, 26221), (71, 26266), (75, 26308), (76, 26350), (84, 26572), (89, 26629),

Gene: Ejimix\_39 Start: 30979, Stop: 32907, Start Num: 1

Candidate Starts for Ejimix\_39:

(Start: 1 @30979 has 23 MA's), (16, 31225), (24, 31363), (26, 31399), (29, 31447), (38, 31603), (40, 31693), (42, 31732), (44, 31798), (45, 31810), (46, 31813), (47, 31843), (50, 31903), (54, 32050), (56, 32071), (60, 32188), (63, 32248), (64, 32269), (68, 32347), (72, 32485), (75, 32533), (78, 32593), (81, 32647), (82, 32713), (84, 32794),

Gene: EnzoK\_31 Start: 24307, Stop: 26160, Start Num: 2

Candidate Starts for EnzoK\_31:

(Start: 2 @24307 has 206 MA's), (5, 24388), (9, 24454), (17, 24523), (18, 24526), (21, 24571), (22, 24598), (23, 24634), (25, 24676), (27, 24712), (44, 25090), (48, 25192), (52, 25264), (54, 25351), (62, 25507), (71, 25738), (75, 25780), (76, 25822), (84, 26044), (86, 26065), (89, 26101),

Gene: EricMillard\_39 Start: 30512, Stop: 32440, Start Num: 1

Candidate Starts for EricMillard\_39:

(Start: 1 @30512 has 23 MA's), (11, 30707), (23, 30875), (26, 30932), (28, 30971), (31, 31001), (34, 31067), (42, 31265), (44, 31331), (47, 31376), (50, 31436), (55, 31595), (64, 31802), (73, 32045), (75, 32066), (78, 32126), (81, 32180), (82, 32246), (83, 32285), (89, 32384),

Gene: Espresso\_31 Start: 24199, Stop: 26052, Start Num: 2

Candidate Starts for Espresso\_31:

(Start: 2 @24199 has 206 MA's), (3, 24217), (5, 24280), (9, 24346), (17, 24415), (18, 24418), (21, 24463), (22, 24490), (23, 24526), (25, 24568), (27, 24604), (32, 24676), (44, 24982), (52, 25156), (54, 25243), (59, 25345), (62, 25399), (69, 25585), (75, 25672), (76, 25714), (84, 25936), (89, 25993),

Gene: Euphoria\_31 Start: 24089, Stop: 25942, Start Num: 2

Candidate Starts for Euphoria\_31:

(Start: 2 @24089 has 206 MA's), (5, 24170), (9, 24236), (17, 24305), (21, 24353), (22, 24380), (25, 24458), (27, 24494), (32, 24566), (44, 24872), (52, 25046), (54, 25133), (62, 25289), (69, 25475), (71, 25520), (75, 25562), (76, 25604), (84, 25826), (89, 25883),

Gene: Eyeball\_31 Start: 23894, Stop: 25747, Start Num: 2

Candidate Starts for Eyeball\_31:

(Start: 2 @23894 has 206 MA's), (5, 23975), (9, 24041), (17, 24110), (21, 24158), (22, 24185), (23, 24221), (25, 24263), (27, 24299), (32, 24371), (44, 24677), (51, 24821), (52, 24851), (54, 24938), (62, 25094), (69, 25280), (71, 25325), (75, 25367), (76, 25409), (84, 25631), (89, 25688),

Gene: Fajezeel\_33 Start: 24404, Stop: 26257, Start Num: 2

Candidate Starts for Fajezeel\_33:

(Start: 2 @24404 has 206 MA's), (5, 24485), (9, 24551), (17, 24620), (21, 24668), (22, 24695), (25, 24773), (27, 24809), (44, 25187), (52, 25361), (54, 25448), (62, 25604), (71, 25835), (75, 25877), (76, 25919), (84, 26141), (89, 26198),

Gene: Fascinus\_30 Start: 23911, Stop: 25764, Start Num: 2

Candidate Starts for Fascinus\_30:

(Start: 2 @23911 has 206 MA's), (5, 23992), (6, 24016), (9, 24058), (17, 24127), (21, 24175), (22, 24202), (25, 24280), (27, 24316), (32, 24388), (44, 24694), (52, 24868), (54, 24955), (62, 25111), (69, 25297), (71, 25342), (75, 25384), (76, 25426), (84, 25648), (89, 25705),

Gene: Fenn\_32 Start: 25722, Stop: 27575, Start Num: 2

Candidate Starts for Fenn\_32:

(Start: 2 @25722 has 206 MA's), (5, 25803), (9, 25869), (17, 25938), (21, 25986), (22, 26013), (23, 26049), (25, 26091), (27, 26127), (32, 26199), (44, 26505), (52, 26679), (54, 26766), (62, 26922), (71, 27153), (75, 27195), (76, 27237), (84, 27459), (89, 27516),

Gene: Forsytheast\_31 Start: 24328, Stop: 26181, Start Num: 2

Candidate Starts for Forsytheast\_31:

(Start: 2 @24328 has 206 MA's), (5, 24409), (9, 24475), (17, 24544), (18, 24547), (21, 24592), (22, 24619), (23, 24655), (25, 24697), (27, 24733), (32, 24805), (44, 25111), (52, 25285), (54, 25372), (58, 25471), (62, 25528), (71, 25759), (75, 25801), (76, 25843), (84, 26065), (86, 26086), (89, 26122),

Gene: Francis47\_31 Start: 24594, Stop: 26447, Start Num: 2

Candidate Starts for Francis47\_31:

(Start: 2 @24594 has 206 MA's), (5, 24675), (9, 24741), (17, 24810), (21, 24858), (22, 24885), (23, 24921), (25, 24963), (27, 24999), (32, 25071), (44, 25377), (48, 25479), (52, 25551), (54, 25638), (62, 25794), (71, 26025), (74, 26064), (75, 26067), (76, 26109), (84, 26331), (86, 26352), (89, 26388),

Gene: Froghopper\_32 Start: 24056, Stop: 25909, Start Num: 2

Candidate Starts for Froghopper\_32:

(Start: 2 @24056 has 206 MA's), (5, 24137), (6, 24161), (9, 24203), (17, 24272), (21, 24320), (22, 24347), (25, 24425), (27, 24461), (32, 24533), (44, 24839), (48, 24941), (52, 25013), (54, 25100), (62, 25256), (71, 25487), (75, 25529), (76, 25571), (84, 25793), (89, 25850),

Gene: Fushigi\_32 Start: 24513, Stop: 26366, Start Num: 2

Candidate Starts for Fushigi\_32:

(Start: 2 @24513 has 206 MA's), (5, 24594), (6, 24618), (9, 24660), (17, 24729), (21, 24777), (22, 24804), (25, 24882), (27, 24918), (32, 24990), (44, 25296), (52, 25470), (54, 25557), (62, 25713), (71, 25944), (75, 25986), (76, 26028), (84, 26250), (89, 26307),

Gene: GMonster\_30 Start: 23473, Stop: 25326, Start Num: 2

Candidate Starts for GMonster\_30:

(Start: 2 @23473 has 206 MA's), (5, 23554), (9, 23620), (17, 23689), (21, 23737), (22, 23764), (23, 23800), (25, 23842), (27, 23878), (32, 23950), (44, 24256), (52, 24430), (54, 24517), (57, 24589), (62, 24673), (71, 24904), (75, 24946), (76, 24988), (84, 25210), (86, 25231), (89, 25267),

Gene: GageAP\_33 Start: 24827, Stop: 26680, Start Num: 2

Candidate Starts for GageAP\_33:

(Start: 2 @24827 has 206 MA's), (5, 24908), (9, 24974), (17, 25043), (18, 25046), (21, 25091), (22, 25118), (23, 25154), (25, 25196), (27, 25232), (32, 25304), (44, 25610), (51, 25754), (52, 25784), (54, 25871), (62, 26027), (71, 26258), (75, 26300), (76, 26342), (84, 26564), (89, 26621),

Gene: Gandalf20\_32 Start: 24932, Stop: 26785, Start Num: 2

Candidate Starts for Gandalf20\_32:

(Start: 2 @24932 has 206 MA's), (5, 25013), (9, 25079), (17, 25148), (21, 25196), (22, 25223), (25, 25301), (27, 25337), (30, 25376), (32, 25409), (35, 25460), (44, 25715), (48, 25817), (52, 25889), (54, 25976), (62, 26132), (71, 26363), (75, 26405), (76, 26447), (84, 26669), (86, 26690), (89, 26726),

Gene: Gompeii16\_31 Start: 24589, Stop: 26442, Start Num: 2

Candidate Starts for Gompeii16\_31:

(Start: 2 @24589 has 206 MA's), (5, 24670), (6, 24694), (9, 24736), (17, 24805), (21, 24853), (22, 24880), (23, 24916), (25, 24958), (27, 24994), (32, 25066), (44, 25372), (48, 25474), (52, 25546), (54, 25633), (62, 25789), (71, 26020), (74, 26059), (75, 26062), (76, 26104), (84, 26326), (86, 26347), (89, 26383),

Gene: Graduation\_33 Start: 24811, Stop: 26664, Start Num: 2

Candidate Starts for Graduation\_33:

(Start: 2 @24811 has 206 MA's), (5, 24892), (9, 24958), (17, 25027), (18, 25030), (21, 25075), (22, 25102), (23, 25138), (25, 25180), (27, 25216), (32, 25288), (44, 25594), (52, 25768), (54, 25855), (62, 26011), (71, 26242), (75, 26284), (76, 26326), (84, 26548), (86, 26569), (89, 26605),

Gene: GrecoEtereo\_33 Start: 24898, Stop: 26751, Start Num: 2

Candidate Starts for GrecoEtereo\_33:

(Start: 2 @24898 has 206 MA's), (5, 24979), (9, 25045), (17, 25114), (21, 25162), (22, 25189), (25, 25267), (27, 25303), (32, 25375), (44, 25681), (52, 25855), (54, 25942), (62, 26098), (69, 26284), (71, 26329), (75, 26371), (76, 26413), (84, 26635), (89, 26692),

Gene: Greg\_33 Start: 24404, Stop: 26257, Start Num: 2

Candidate Starts for Greg\_33:

(Start: 2 @24404 has 206 MA's), (5, 24485), (9, 24551), (17, 24620), (21, 24668), (22, 24695), (25, 24773), (27, 24809), (44, 25187), (52, 25361), (54, 25448), (62, 25604), (71, 25835), (75, 25877), (76, 25919), (84, 26141), (89, 26198),

Gene: Gwendoluna\_33 Start: 26046, Stop: 27899, Start Num: 2

Candidate Starts for Gwendoluna\_33:

(Start: 2 @26046 has 206 MA's), (5, 26127), (9, 26193), (17, 26262), (21, 26310), (22, 26337), (25, 26415), (30, 26490), (32, 26523), (35, 26574), (44, 26829), (52, 27003), (54, 27090), (59, 27192), (62, 27246), (69, 27432), (71, 27477), (75, 27519), (76, 27561), (84, 27783), (86, 27804), (89, 27840),

Gene: Gyzlar\_33 Start: 25352, Stop: 27205, Start Num: 2

Candidate Starts for Gyzlar\_33:

(Start: 2 @25352 has 206 MA's), (5, 25433), (9, 25499), (17, 25568), (21, 25616), (22, 25643), (25, 25721), (27, 25757), (32, 25829), (44, 26135), (52, 26309), (54, 26396), (62, 26552), (64, 26612), (69, 26738), (71, 26783), (75, 26825), (76, 26867), (84, 27089), (86, 27110), (89, 27146),

Gene: Halley\_39 Start: 30225, Stop: 32153, Start Num: 1

Candidate Starts for Halley\_39:

(Start: 1 @30225 has 23 MA's), (11, 30420), (23, 30588), (26, 30645), (28, 30684), (31, 30714), (34, 30780), (42, 30978), (44, 31044), (47, 31089), (50, 31149), (55, 31308), (64, 31515), (73, 31758), (75, 31779), (78, 31839), (81, 31893), (82, 31959), (83, 31998), (89, 32097),

Gene: Hami1\_33 Start: 24498, Stop: 26378, Start Num: 2

Candidate Starts for Hami1\_33:

(Start: 2 @24498 has 206 MA's), (5, 24579), (9, 24645), (17, 24714), (21, 24762), (22, 24789), (23, 24825), (25, 24867), (27, 24903), (32, 24975), (44, 25281), (51, 25425), (52, 25455), (54, 25542), (62, 25698), (71, 25929), (75, 25971), (76, 26013), (84, 26235), (87, 26280), (89, 26292),

Gene: HanShotFirst\_31 Start: 24032, Stop: 25885, Start Num: 2

Candidate Starts for HanShotFirst\_31:

(Start: 2 @24032 has 206 MA's), (5, 24113), (9, 24179), (17, 24248), (21, 24296), (22, 24323), (23, 24359), (25, 24401), (27, 24437), (32, 24509), (44, 24815), (52, 24989), (54, 25076), (62, 25232), (71, 25463), (75, 25505), (76, 25547), (84, 25769), (86, 25790), (89, 25826),

Gene: HarryOW\_32 Start: 24486, Stop: 26339, Start Num: 2

Candidate Starts for HarryOW\_32:

(Start: 2 @24486 has 206 MA's), (5, 24567), (9, 24633), (17, 24702), (21, 24750), (22, 24777), (25, 24855), (27, 24891), (32, 24963), (44, 25269), (52, 25443), (54, 25530), (62, 25686), (69, 25872), (71, 25917), (75, 25959), (76, 26001), (84, 26223), (89, 26280),

Gene: Hermia\_34 Start: 25614, Stop: 27467, Start Num: 2

Candidate Starts for Hermia\_34:

(Start: 2 @25614 has 206 MA's), (5, 25695), (9, 25761), (17, 25830), (21, 25878), (22, 25905), (25, 25983), (32, 26091), (44, 26397), (48, 26499), (52, 26571), (54, 26658), (62, 26814), (64, 26874), (71, 27045), (75, 27087), (76, 27129), (84, 27351), (86, 27372), (89, 27408),

Gene: HermioneGrange\_31 Start: 24013, Stop: 25866, Start Num: 2

Candidate Starts for HermioneGrange\_31:

(Start: 2 @24013 has 206 MA's), (5, 24094), (9, 24160), (17, 24229), (21, 24277), (22, 24304), (25, 24382), (27, 24418), (32, 24490), (44, 24796), (52, 24970), (54, 25057), (62, 25213), (71, 25444), (75, 25486), (76, 25528), (84, 25750), (86, 25771), (89, 25807),

Gene: HokkenD\_34 Start: 29774, Stop: 31702, Start Num: 1

Candidate Starts for HokkenD\_34:

(Start: 1 @29774 has 23 MA's), (11, 29969), (23, 30137), (26, 30194), (28, 30233), (31, 30263), (34, 30329), (42, 30527), (44, 30593), (47, 30638), (50, 30698), (55, 30857), (64, 31064), (73, 31307), (75, 31328), (78, 31388), (81, 31442), (82, 31508), (83, 31547), (89, 31646),

Gene: Homines\_31 Start: 24385, Stop: 26238, Start Num: 2

Candidate Starts for Homines\_31:

(Start: 2 @24385 has 206 MA's), (5, 24466), (9, 24532), (17, 24601), (21, 24649), (22, 24676), (25, 24754), (27, 24790), (32, 24862), (44, 25168), (52, 25342), (54, 25429), (62, 25585), (69, 25771), (71, 25816), (75, 25858), (76, 25900), (84, 26122), (89, 26179),

Gene: Hope4ever\_31 Start: 24501, Stop: 26354, Start Num: 2

Candidate Starts for Hope4ever\_31:

(Start: 2 @24501 has 206 MA's), (3, 24519), (5, 24582), (9, 24648), (17, 24717), (18, 24720), (21, 24765), (22, 24792), (23, 24828), (25, 24870), (27, 24906), (32, 24978), (43, 25269), (44, 25284), (52, 25458), (54, 25545), (62, 25701), (71, 25932), (75, 25974), (76, 26016), (84, 26238), (89, 26295),

Gene: Hughesyang\_37 Start: 30122, Stop: 32050, Start Num: 1

Candidate Starts for Hughesyang\_37:

(Start: 1 @30122 has 23 MA's), (16, 30368), (24, 30506), (26, 30542), (29, 30590), (38, 30746), (40, 30836), (42, 30875), (44, 30941), (45, 30953), (46, 30956), (47, 30986), (50, 31046), (54, 31193), (56, 31214), (60, 31331), (63, 31391), (64, 31412), (68, 31490), (72, 31628), (75, 31676), (78, 31736), (81, 31790), (82, 31856), (84, 31937),

Gene: ILeeKay\_33 Start: 24265, Stop: 26118, Start Num: 2

Candidate Starts for ILeeKay\_33:

(Start: 2 @24265 has 206 MA's), (5, 24346), (9, 24412), (17, 24481), (21, 24529), (22, 24556), (23, 24592), (25, 24634), (27, 24670), (32, 24742), (44, 25048), (52, 25222), (54, 25309), (62, 25465), (64, 25525), (69, 25651), (71, 25696), (75, 25738), (76, 25780), (84, 26002), (86, 26023), (89, 26059),

Gene: Ichabod\_32 Start: 24289, Stop: 26142, Start Num: 2

Candidate Starts for Ichabod\_32:

(Start: 2 @24289 has 206 MA's), (5, 24370), (9, 24436), (17, 24505), (21, 24553), (22, 24580), (23, 24616), (25, 24658), (27, 24694), (32, 24766), (44, 25072), (48, 25174), (52, 25246), (54, 25333), (62, 25489), (64, 25549), (71, 25720), (75, 25762), (76, 25804), (84, 26026), (89, 26083),

Gene: IgnatiusPatJac\_31 Start: 24347, Stop: 26200, Start Num: 2

Candidate Starts for IgnatiusPatJac\_31:

(Start: 2 @24347 has 206 MA's), (3, 24365), (5, 24428), (9, 24494), (17, 24563), (18, 24566), (21, 24611), (22, 24638), (23, 24674), (25, 24716), (27, 24752), (32, 24824), (44, 25130), (52, 25304), (54, 25391), (62, 25547), (64, 25607), (71, 25778), (75, 25820), (76, 25862), (84, 26084), (86, 26105), (89, 26141),

Gene: Inyanga\_30 Start: 23868, Stop: 25721, Start Num: 2

Candidate Starts for Inyanga\_30:

(Start: 2 @23868 has 206 MA's), (5, 23949), (9, 24015), (17, 24084), (21, 24132), (22, 24159), (25, 24237), (27, 24273), (32, 24345), (44, 24651), (52, 24825), (54, 24912), (62, 25068), (69, 25254), (71, 25299), (75, 25341), (76, 25383), (89, 25662),

Gene: Iqorha\_30 Start: 23867, Stop: 25720, Start Num: 2

Candidate Starts for Iqorha\_30:

(Start: 2 @23867 has 206 MA's), (5, 23948), (9, 24014), (17, 24083), (21, 24131), (22, 24158), (25, 24236), (27, 24272), (32, 24344), (44, 24650), (52, 24824), (54, 24911), (62, 25067), (69, 25253), (71, 25298), (75, 25340), (76, 25382), (89, 25661),

Gene: JC27\_33 Start: 25001, Stop: 26854, Start Num: 2

Candidate Starts for JC27\_33:

(Start: 2 @25001 has 206 MA's), (5, 25082), (9, 25148), (17, 25217), (21, 25265), (22, 25292), (25, 25370), (27, 25406), (32, 25478), (44, 25784), (52, 25958), (54, 26045), (62, 26201), (71, 26432), (75, 26474), (76, 26516), (84, 26738), (89, 26795),

Gene: JackSparrow\_32 Start: 24463, Stop: 26316, Start Num: 2

Candidate Starts for JackSparrow\_32:

(Start: 2 @24463 has 206 MA's), (5, 24544), (9, 24610), (17, 24679), (21, 24727), (22, 24754), (23, 24790), (25, 24832), (27, 24868), (32, 24940), (44, 25246), (52, 25420), (54, 25507), (62, 25663), (69, 25849), (71, 25894), (75, 25936), (76, 25978), (84, 26200), (89, 26257),

Gene: Jasper\_32 Start: 23942, Stop: 25795, Start Num: 2

Candidate Starts for Jasper\_32:

(Start: 2 @23942 has 206 MA's), (5, 24023), (9, 24089), (17, 24158), (21, 24206), (22, 24233), (25, 24311), (27, 24347), (32, 24419), (44, 24725), (52, 24899), (54, 24986), (62, 25142), (69, 25328), (71, 25373), (75, 25415), (76, 25457), (84, 25679), (89, 25736),

Gene: Jerm2\_32 Start: 24285, Stop: 26138, Start Num: 2

Candidate Starts for Jerm2\_32:

(Start: 2 @24285 has 206 MA's), (5, 24366), (9, 24432), (17, 24501), (21, 24549), (22, 24576), (25, 24654), (27, 24690), (32, 24762), (44, 25068), (52, 25242), (54, 25329), (62, 25485), (71, 25716), (75,

25758), (76, 25800), (84, 26022), (86, 26043), (89, 26079),

Gene: Jorgensen\_31 Start: 23996, Stop: 25849, Start Num: 2

Candidate Starts for Jorgensen\_31:

(Start: 2 @23996 has 206 MA's), (5, 24077), (9, 24143), (17, 24212), (21, 24260), (22, 24287), (25, 24365), (32, 24473), (44, 24779), (52, 24953), (54, 25040), (58, 25139), (62, 25196), (71, 25427), (75, 25469), (76, 25511), (84, 25733), (86, 25754), (89, 25790),

Gene: JuicyJay\_41 Start: 31975, Stop: 33903, Start Num: 1

Candidate Starts for JuicyJay\_41:

(Start: 1 @31975 has 23 MA's), (11, 32170), (23, 32338), (26, 32395), (28, 32434), (31, 32464), (34, 32530), (42, 32728), (44, 32794), (47, 32839), (50, 32899), (55, 33058), (64, 33265), (73, 33508), (75, 33529), (78, 33589), (81, 33643), (82, 33709), (83, 33748), (89, 33847),

Gene: JuliaChild\_33 Start: 24641, Stop: 26494, Start Num: 2

Candidate Starts for JuliaChild\_33:

(Start: 2 @24641 has 206 MA's), (5, 24722), (9, 24788), (17, 24857), (21, 24905), (22, 24932), (25, 25010), (27, 25046), (32, 25118), (44, 25424), (48, 25526), (52, 25598), (54, 25685), (62, 25841), (71, 26072), (75, 26114), (76, 26156), (84, 26378), (89, 26435),

Gene: KBG\_32 Start: 24995, Stop: 26998, Start Num: 2

Candidate Starts for KBG\_32:

(Start: 2 @24995 has 206 MA's), (5, 25076), (6, 25100), (9, 25142), (17, 25211), (18, 25214), (21, 25259), (22, 25286), (23, 25322), (25, 25364), (27, 25400), (32, 25472), (44, 25778), (48, 25880), (52, 25952), (54, 26039), (62, 26195), (71, 26426), (74, 26465), (75, 26468), (76, 26510), (84, 26732), (87, 26777), (89, 26789),

Gene: KSSJEB\_31 Start: 23889, Stop: 25742, Start Num: 2

Candidate Starts for KSSJEB\_31:

(Start: 2 @23889 has 206 MA's), (5, 23970), (9, 24036), (17, 24105), (21, 24153), (22, 24180), (25, 24258), (27, 24294), (32, 24366), (44, 24672), (48, 24774), (52, 24846), (54, 24933), (62, 25089), (64, 25149), (71, 25320), (75, 25362), (76, 25404), (84, 25626), (86, 25647), (89, 25683),

Gene: Kalah2\_39 Start: 30562, Stop: 32490, Start Num: 1

Candidate Starts for Kalah2\_39:

(Start: 1 @30562 has 23 MA's), (11, 30757), (23, 30925), (26, 30982), (28, 31021), (31, 31051), (34, 31117), (42, 31315), (44, 31381), (47, 31426), (50, 31486), (55, 31645), (64, 31852), (73, 32095), (75, 32116), (78, 32176), (81, 32230), (82, 32296), (83, 32335), (89, 32434),

Gene: Kanely\_32 Start: 24699, Stop: 26552, Start Num: 2

Candidate Starts for Kanely\_32:

(Start: 2 @24699 has 206 MA's), (5, 24780), (9, 24846), (17, 24915), (21, 24963), (22, 24990), (25, 25068), (27, 25104), (32, 25176), (44, 25482), (52, 25656), (54, 25743), (62, 25899), (71, 26130), (75, 26172), (76, 26214), (84, 26436), (86, 26457), (89, 26493),

Gene: Kenmech\_34 Start: 25405, Stop: 27258, Start Num: 2

Candidate Starts for Kenmech\_34:

(Start: 2 @25405 has 206 MA's), (3, 25423), (5, 25486), (9, 25552), (17, 25621), (18, 25624), (21, 25669), (22, 25696), (25, 25774), (27, 25810), (32, 25882), (44, 26188), (52, 26362), (54, 26449), (62, 26605), (69, 26791), (71, 26836), (75, 26878), (76, 26920), (79, 26980), (84, 27142), (89, 27199),

Gene: Killigrew\_29 Start: 23611, Stop: 25464, Start Num: 2

Candidate Starts for Killigrew\_29:

(Start: 2 @23611 has 206 MA's), (3, 23629), (5, 23692), (9, 23758), (17, 23827), (21, 23875), (22, 23902), (23, 23938), (25, 23980), (27, 24016), (32, 24088), (44, 24394), (52, 24568), (54, 24655), (62, 24811), (69, 24997), (75, 25084), (76, 25126), (84, 25348), (86, 25369), (89, 25405),

Gene: Klein\_39 Start: 29786, Stop: 31714, Start Num: 1

Candidate Starts for Klein\_39:

(Start: 1 @29786 has 23 MA's), (11, 29981), (23, 30149), (26, 30206), (28, 30245), (31, 30275), (34, 30341), (42, 30539), (44, 30605), (47, 30650), (50, 30710), (55, 30869), (64, 31076), (73, 31319), (75, 31340), (78, 31400), (81, 31454), (82, 31520), (83, 31559), (89, 31658),

Gene: Kugel\_32 Start: 24272, Stop: 26125, Start Num: 2

Candidate Starts for Kugel\_32:

(Start: 2 @24272 has 206 MA's), (5, 24353), (9, 24419), (17, 24488), (21, 24536), (22, 24563), (25, 24641), (27, 24677), (30, 24716), (32, 24749), (35, 24800), (44, 25055), (51, 25199), (52, 25229), (54, 25316), (62, 25472), (69, 25658), (71, 25703), (75, 25745), (76, 25787), (84, 26009), (89, 26066),

Gene: KyMonks1A\_33 Start: 24438, Stop: 26291, Start Num: 2

Candidate Starts for KyMonks1A\_33:

(Start: 2 @24438 has 206 MA's), (5, 24519), (9, 24585), (17, 24654), (21, 24702), (25, 24807), (27, 24843), (32, 24915), (44, 25221), (48, 25323), (52, 25395), (54, 25482), (62, 25638), (71, 25869), (75, 25911), (76, 25953), (84, 26175), (89, 26232),

Gene: Kykar\_31 Start: 24060, Stop: 25913, Start Num: 2

Candidate Starts for Kykar\_31:

(Start: 2 @24060 has 206 MA's), (5, 24141), (9, 24207), (17, 24276), (21, 24324), (22, 24351), (25, 24429), (27, 24465), (32, 24537), (44, 24843), (52, 25017), (54, 25104), (59, 25206), (62, 25260), (71, 25491), (75, 25533), (76, 25575), (84, 25797), (86, 25818), (89, 25854),

Gene: Lamina13\_31 Start: 23709, Stop: 25562, Start Num: 2

Candidate Starts for Lamina13\_31:

(Start: 2 @23709 has 206 MA's), (5, 23790), (9, 23856), (17, 23925), (21, 23973), (22, 24000), (25, 24078), (30, 24153), (32, 24186), (35, 24237), (44, 24492), (52, 24666), (54, 24753), (62, 24909), (69, 25095), (71, 25140), (75, 25182), (76, 25224), (84, 25446), (86, 25467), (89, 25503),

Gene: Lesedi\_30 Start: 23867, Stop: 25720, Start Num: 2

Candidate Starts for Lesedi\_30:

(Start: 2 @23867 has 206 MA's), (5, 23948), (9, 24014), (17, 24083), (21, 24131), (22, 24158), (25, 24236), (27, 24272), (32, 24344), (44, 24650), (52, 24824), (54, 24911), (62, 25067), (71, 25298), (75, 25340), (76, 25382), (84, 25604), (86, 25625), (87, 25649), (89, 25661),

Gene: Levia\_30 Start: 24856, Stop: 26709, Start Num: 2

Candidate Starts for Levia\_30:

(Start: 2 @24856 has 206 MA's), (5, 24937), (9, 25003), (17, 25072), (21, 25120), (22, 25147), (23, 25183), (25, 25225), (27, 25261), (32, 25333), (44, 25639), (52, 25813), (54, 25900), (60, 26035), (62, 26056), (71, 26287), (75, 26329), (76, 26371), (84, 26593), (89, 26650),

Gene: Licorice\_33 Start: 25096, Stop: 26949, Start Num: 2

Candidate Starts for Licorice\_33:

(Start: 2 @25096 has 206 MA's), (5, 25177), (9, 25243), (17, 25312), (21, 25360), (22, 25387), (25, 25465), (27, 25501), (32, 25573), (44, 25879), (52, 26053), (54, 26140), (62, 26296), (71, 26527), (75, 26569), (76, 26611), (84, 26833), (89, 26890),

Gene: LilBib\_32 Start: 25309, Stop: 27162, Start Num: 2

Candidate Starts for LilBib\_32:

(Start: 2 @25309 has 206 MA's), (5, 25390), (9, 25456), (17, 25525), (21, 25573), (22, 25600), (25, 25678), (27, 25714), (32, 25786), (44, 26092), (52, 26266), (54, 26353), (62, 26509), (71, 26740), (75, 26782), (76, 26824), (84, 27046), (89, 27103),

Gene: Lockley\_31 Start: 24050, Stop: 25903, Start Num: 2

Candidate Starts for Lockley\_31:

(Start: 2 @24050 has 206 MA's), (3, 24068), (5, 24131), (9, 24197), (17, 24266), (18, 24269), (21, 24314), (22, 24341), (23, 24377), (25, 24419), (27, 24455), (32, 24527), (44, 24833), (48, 24935), (52, 25007), (54, 25094), (62, 25250), (69, 25436), (71, 25481), (75, 25523), (76, 25565), (84, 25787), (86, 25808), (89, 25844),

Gene: Lopton\_32 Start: 25511, Stop: 27364, Start Num: 2

Candidate Starts for Lopton\_32:

(Start: 2 @25511 has 206 MA's), (3, 25529), (5, 25592), (9, 25658), (17, 25727), (21, 25775), (22, 25802), (23, 25838), (25, 25880), (27, 25916), (32, 25988), (44, 26294), (48, 26396), (52, 26468), (54, 26555), (62, 26711), (64, 26771), (71, 26942), (75, 26984), (76, 27026), (84, 27248), (86, 27269), (89, 27305),

Gene: LunarLander\_33 Start: 24212, Stop: 26065, Start Num: 2

Candidate Starts for LunarLander\_33:

(Start: 2 @24212 has 206 MA's), (5, 24293), (9, 24359), (17, 24428), (21, 24476), (22, 24503), (23, 24539), (25, 24581), (27, 24617), (32, 24689), (44, 24995), (51, 25139), (52, 25169), (54, 25256), (62, 25412), (64, 25472), (69, 25598), (71, 25643), (75, 25685), (76, 25727), (84, 25949), (89, 26006),

Gene: MPlant7149\_30 Start: 23639, Stop: 25492, Start Num: 2

Candidate Starts for MPlant7149\_30:

(Start: 2 @23639 has 206 MA's), (5, 23720), (9, 23786), (17, 23855), (21, 23903), (22, 23930), (25, 24008), (27, 24044), (32, 24116), (44, 24422), (52, 24596), (54, 24683), (62, 24839), (71, 25070), (75, 25112), (76, 25154), (84, 25376), (89, 25433),

Gene: Magnar\_31 Start: 23836, Stop: 25689, Start Num: 2

Candidate Starts for Magnar\_31:

(Start: 2 @23836 has 206 MA's), (5, 23917), (9, 23983), (17, 24052), (21, 24100), (22, 24127), (25, 24205), (27, 24241), (32, 24313), (42, 24553), (44, 24619), (52, 24793), (54, 24880), (62, 25036), (71, 25267), (75, 25309), (76, 25351), (84, 25573), (86, 25594), (89, 25630),

Gene: Magnito\_30 Start: 23588, Stop: 25441, Start Num: 2

Candidate Starts for Magnito\_30:

(Start: 2 @23588 has 206 MA's), (5, 23669), (9, 23735), (17, 23804), (21, 23852), (22, 23879), (25, 23957), (27, 23993), (32, 24065), (44, 24371), (49, 24482), (52, 24545), (54, 24632), (62, 24788), (69, 24974), (71, 25019), (75, 25061), (76, 25103), (84, 25325), (89, 25382),

Gene: Makemake\_31 Start: 25304, Stop: 27157, Start Num: 2

Candidate Starts for Makemake\_31:

(Start: 2 @25304 has 206 MA's), (5, 25385), (9, 25451), (17, 25520), (21, 25568), (22, 25595), (23, 25631), (25, 25673), (27, 25709), (32, 25781), (44, 26087), (52, 26261), (54, 26348), (62, 26504), (69, 26690), (71, 26735), (75, 26777), (76, 26819), (84, 27041), (86, 27062), (89, 27098),

Gene: Manatee\_32 Start: 23834, Stop: 25687, Start Num: 2

Candidate Starts for Manatee\_32:

(Start: 2 @23834 has 206 MA's), (5, 23915), (9, 23981), (17, 24050), (21, 24098), (22, 24125), (25, 24203), (27, 24239), (32, 24311), (44, 24617), (52, 24791), (54, 24878), (62, 25034), (69, 25220), (71,



25265), (75, 25307), (76, 25349), (84, 25571), (89, 25628),

Gene: Marcell\_31 Start: 24324, Stop: 26177, Start Num: 2

Candidate Starts for Marcell\_31:

(Start: 2 @24324 has 206 MA's), (5, 24405), (9, 24471), (17, 24540), (21, 24588), (22, 24615), (25, 24693), (27, 24729), (32, 24801), (44, 25107), (52, 25281), (54, 25368), (62, 25524), (71, 25755), (75, 25797), (76, 25839), (84, 26061), (89, 26118),

Gene: Marchy\_30 Start: 23629, Stop: 25482, Start Num: 2

Candidate Starts for Marchy\_30:

(Start: 2 @23629 has 206 MA's), (5, 23710), (9, 23776), (17, 23845), (21, 23893), (22, 23920), (23, 23956), (25, 23998), (27, 24034), (32, 24106), (44, 24412), (52, 24586), (54, 24673), (60, 24808), (62, 24829), (71, 25060), (75, 25102), (76, 25144), (84, 25366), (89, 25423),

Gene: Marco3\_31 Start: 24224, Stop: 26077, Start Num: 2

Candidate Starts for Marco3\_31:

(Start: 2 @24224 has 206 MA's), (5, 24305), (9, 24371), (17, 24440), (21, 24488), (22, 24515), (25, 24593), (32, 24701), (44, 25007), (52, 25181), (54, 25268), (62, 25424), (71, 25655), (75, 25697), (76, 25739), (84, 25961), (89, 26018),

Gene: Marge\_32 Start: 24724, Stop: 26577, Start Num: 2

Candidate Starts for Marge\_32:

(Start: 2 @24724 has 206 MA's), (5, 24805), (9, 24871), (17, 24940), (21, 24988), (22, 25015), (25, 25093), (32, 25201), (44, 25507), (52, 25681), (54, 25768), (62, 25924), (71, 26155), (75, 26197), (76, 26239), (84, 26461), (89, 26518),

Gene: Marleymoo\_43 Start: 32813, Stop: 34741, Start Num: 1

Candidate Starts for Marleymoo\_43:

(Start: 1 @32813 has 23 MA's), (11, 33008), (23, 33176), (26, 33233), (30, 33293), (31, 33302), (41, 33530), (42, 33566), (44, 33632), (47, 33677), (49, 33734), (50, 33737), (60, 34022), (64, 34103), (72, 34319), (73, 34346), (75, 34367), (78, 34427), (81, 34481), (82, 34547),

Gene: Maroc7\_30 Start: 23828, Stop: 25681, Start Num: 2

Candidate Starts for Maroc7\_30:

(Start: 2 @23828 has 206 MA's), (5, 23909), (9, 23975), (14, 24014), (17, 24044), (21, 24092), (22, 24119), (25, 24197), (27, 24233), (32, 24305), (44, 24611), (52, 24785), (54, 24872), (62, 25028), (64, 25088), (69, 25214), (71, 25259), (75, 25301), (76, 25343), (79, 25403), (84, 25565), (86, 25586), (89, 25622),

Gene: Marsha\_31 Start: 24903, Stop: 26756, Start Num: 2

Candidate Starts for Marsha\_31:

(Start: 2 @24903 has 206 MA's), (5, 24984), (9, 25050), (17, 25119), (21, 25167), (22, 25194), (25, 25272), (27, 25308), (32, 25380), (44, 25686), (52, 25860), (54, 25947), (62, 26103), (71, 26334), (75, 26376), (76, 26418), (84, 26640), (89, 26697),

Gene: MaryBeth\_31 Start: 24256, Stop: 26109, Start Num: 2

Candidate Starts for MaryBeth\_31:

(Start: 2 @24256 has 206 MA's), (5, 24337), (6, 24361), (9, 24403), (17, 24472), (21, 24520), (22, 24547), (23, 24583), (25, 24625), (27, 24661), (32, 24733), (44, 25039), (52, 25213), (54, 25300), (62, 25456), (64, 25516), (69, 25642), (71, 25687), (75, 25729), (76, 25771), (84, 25993), (89, 26050),

Gene: McGuire\_32 Start: 24126, Stop: 25979, Start Num: 2

Candidate Starts for McGuire\_32:

(Start: 2 @24126 has 206 MA's), (5, 24207), (9, 24273), (17, 24342), (21, 24390), (22, 24417), (23, 24453), (25, 24495), (27, 24531), (32, 24603), (44, 24909), (52, 25083), (54, 25170), (62, 25326), (69, 25512), (71, 25557), (75, 25599), (76, 25641), (84, 25863), (89, 25920),

Gene: McSinger\_32 Start: 24518, Stop: 26371, Start Num: 2

Candidate Starts for McSinger\_32:

(Start: 2 @24518 has 206 MA's), (5, 24599), (9, 24665), (17, 24734), (21, 24782), (22, 24809), (25, 24887), (27, 24923), (32, 24995), (44, 25301), (52, 25475), (54, 25562), (62, 25718), (71, 25949), (75, 25991), (76, 26033), (84, 26255), (86, 26276), (89, 26312),

Gene: MetalQZJ\_31 Start: 24256, Stop: 26109, Start Num: 2

Candidate Starts for MetalQZJ\_31:

(Start: 2 @24256 has 206 MA's), (5, 24337), (6, 24361), (9, 24403), (17, 24472), (21, 24520), (22, 24547), (23, 24583), (25, 24625), (27, 24661), (32, 24733), (44, 25039), (52, 25213), (54, 25300), (62, 25456), (64, 25516), (69, 25642), (71, 25687), (75, 25729), (76, 25771), (84, 25993), (89, 26050),

Gene: Michley\_31 Start: 23953, Stop: 25806, Start Num: 2

Candidate Starts for Michley\_31:

(Start: 2 @23953 has 206 MA's), (5, 24034), (9, 24100), (13, 24136), (17, 24169), (21, 24217), (22, 24244), (25, 24322), (27, 24358), (30, 24397), (32, 24430), (35, 24481), (44, 24736), (52, 24910), (54, 24997), (62, 25153), (69, 25339), (71, 25384), (75, 25426), (76, 25468), (84, 25690), (89, 25747),

Gene: Mkhuseli\_32 Start: 24151, Stop: 26004, Start Num: 2

Candidate Starts for Mkhuseli\_32:

(Start: 2 @24151 has 206 MA's), (5, 24232), (9, 24298), (17, 24367), (21, 24415), (22, 24442), (25, 24520), (27, 24556), (32, 24628), (44, 24934), (52, 25108), (54, 25195), (62, 25351), (69, 25537), (71, 25582), (75, 25624), (76, 25666), (84, 25888), (89, 25945),

Gene: Molly\_32 Start: 23924, Stop: 25777, Start Num: 2

Candidate Starts for Molly\_32:

(Start: 2 @23924 has 206 MA's), (5, 24005), (9, 24071), (17, 24140), (21, 24188), (22, 24215), (25, 24293), (27, 24329), (32, 24401), (44, 24707), (48, 24809), (52, 24881), (54, 24968), (62, 25124), (71, 25355), (75, 25397), (76, 25439), (84, 25661), (89, 25718),

Gene: Monet\_33 Start: 25352, Stop: 27205, Start Num: 2

Candidate Starts for Monet\_33:

(Start: 2 @25352 has 206 MA's), (5, 25433), (9, 25499), (17, 25568), (21, 25616), (22, 25643), (25, 25721), (27, 25757), (30, 25796), (32, 25829), (35, 25880), (44, 26135), (52, 26309), (54, 26396), (62, 26552), (69, 26738), (71, 26783), (75, 26825), (76, 26867), (84, 27089), (89, 27146),

Gene: Moose\_31 Start: 24328, Stop: 26181, Start Num: 2

Candidate Starts for Moose\_31:

(Start: 2 @24328 has 206 MA's), (5, 24409), (9, 24475), (17, 24544), (18, 24547), (21, 24592), (22, 24619), (23, 24655), (25, 24697), (27, 24733), (32, 24805), (44, 25111), (52, 25285), (54, 25372), (58, 25471), (62, 25528), (71, 25759), (75, 25801), (76, 25843), (84, 26065), (86, 26086), (89, 26122),

Gene: MrGordo\_31 Start: 23816, Stop: 25669, Start Num: 2

Candidate Starts for MrGordo\_31:

(Start: 2 @23816 has 206 MA's), (5, 23897), (9, 23963), (17, 24032), (21, 24080), (22, 24107), (25, 24185), (32, 24293), (44, 24599), (52, 24773), (54, 24860), (62, 25016), (69, 25202), (71, 25247), (75, 25289), (76, 25331), (84, 25553), (89, 25610),

Gene: Mryolo\_30 Start: 23853, Stop: 25706, Start Num: 2

Candidate Starts for Mryolo\_30:

(Start: 2 @23853 has 206 MA's), (5, 23934), (9, 24000), (17, 24069), (21, 24117), (22, 24144), (23, 24180), (25, 24222), (27, 24258), (32, 24330), (44, 24636), (52, 24810), (54, 24897), (62, 25053), (69, 25239), (71, 25284), (75, 25326), (76, 25368), (84, 25590), (89, 25647),

Gene: Mule\_31 Start: 24162, Stop: 26015, Start Num: 2

Candidate Starts for Mule\_31:

(Start: 2 @24162 has 206 MA's), (5, 24243), (9, 24309), (17, 24378), (21, 24426), (22, 24453), (25, 24531), (27, 24567), (32, 24639), (44, 24945), (52, 25119), (54, 25206), (62, 25362), (71, 25593), (75, 25635), (76, 25677), (84, 25899), (86, 25920), (89, 25956),

Gene: Museum\_33 Start: 24172, Stop: 26025, Start Num: 2

Candidate Starts for Museum\_33:

(Start: 2 @24172 has 206 MA's), (5, 24253), (9, 24319), (17, 24388), (21, 24436), (22, 24463), (23, 24499), (25, 24541), (27, 24577), (32, 24649), (44, 24955), (48, 25057), (52, 25129), (54, 25216), (62, 25372), (71, 25603), (75, 25645), (76, 25687), (84, 25909), (86, 25930), (89, 25966),

Gene: NEHalo\_31 Start: 23910, Stop: 25763, Start Num: 2

Candidate Starts for NEHalo\_31:

(Start: 2 @23910 has 206 MA's), (5, 23991), (9, 24057), (17, 24126), (21, 24174), (22, 24201), (25, 24279), (27, 24315), (30, 24354), (32, 24387), (35, 24438), (44, 24693), (52, 24867), (54, 24954), (62, 25110), (69, 25296), (71, 25341), (75, 25383), (76, 25425), (84, 25647), (86, 25668), (89, 25704),

Gene: Naira\_32 Start: 25769, Stop: 27622, Start Num: 2

Candidate Starts for Naira\_32:

(Start: 2 @25769 has 206 MA's), (5, 25850), (9, 25916), (17, 25985), (21, 26033), (22, 26060), (25, 26138), (27, 26174), (32, 26246), (44, 26552), (52, 26726), (54, 26813), (62, 26969), (71, 27200), (75, 27242), (76, 27284), (84, 27506), (89, 27563),

Gene: Nekros\_36 Start: 29735, Stop: 31666, Start Num: 1

Candidate Starts for Nekros\_36:

(Start: 1 @29735 has 23 MA's), (4, 29822), (7, 29873), (10, 29924), (15, 29966), (19, 29999), (26, 30155), (28, 30194), (37, 30341), (38, 30359), (42, 30488), (44, 30554), (45, 30566), (46, 30569), (47, 30599), (49, 30656), (53, 30782), (60, 30944), (64, 31025), (68, 31103), (70, 31196), (75, 31289), (82, 31469), (88, 31601), (89, 31607), (90, 31652),

Gene: Nerujay\_32 Start: 24578, Stop: 26431, Start Num: 2

Candidate Starts for Nerujay\_32:

(Start: 2 @24578 has 206 MA's), (5, 24659), (9, 24725), (17, 24794), (21, 24842), (22, 24869), (23, 24905), (25, 24947), (27, 24983), (32, 25055), (44, 25361), (48, 25463), (52, 25535), (54, 25622), (62, 25778), (69, 25964), (71, 26009), (75, 26051), (76, 26093), (84, 26315), (89, 26372),

Gene: Nhonho\_31 Start: 24329, Stop: 26182, Start Num: 2

Candidate Starts for Nhonho\_31:

(Start: 2 @24329 has 206 MA's), (5, 24410), (9, 24476), (17, 24545), (21, 24593), (22, 24620), (25, 24698), (27, 24734), (32, 24806), (44, 25112), (52, 25286), (54, 25373), (62, 25529), (64, 25589), (69, 25715), (71, 25760), (75, 25802), (76, 25844), (84, 26066), (89, 26123),

Gene: NihilNomen\_38 Start: 30270, Stop: 32198, Start Num: 1

Candidate Starts for NihilNomen\_38:

(Start: 1 @30270 has 23 MA's), (16, 30516), (24, 30654), (26, 30690), (29, 30738), (38, 30894), (40, 30984), (42, 31023), (44, 31089), (45, 31101), (46, 31104), (47, 31134), (50, 31194), (54, 31341), (56, 31362), (60, 31479), (63, 31539), (64, 31560), (68, 31638), (72, 31776), (75, 31824), (78, 31884), (81,

31938), (82, 32004), (84, 32085),

Gene: Niza\_33 Start: 25206, Stop: 27059, Start Num: 2

Candidate Starts for Niza\_33:

(Start: 2 @25206 has 206 MA's), (5, 25287), (9, 25353), (17, 25422), (21, 25470), (22, 25497), (25, 25575), (27, 25611), (32, 25683), (44, 25989), (52, 26163), (54, 26250), (62, 26406), (69, 26592), (71, 26637), (75, 26679), (76, 26721), (84, 26943), (89, 27000),

Gene: Norz\_33 Start: 24985, Stop: 26838, Start Num: 2

Candidate Starts for Norz\_33:

(Start: 2 @24985 has 206 MA's), (5, 25066), (9, 25132), (17, 25201), (21, 25249), (22, 25276), (25, 25354), (27, 25390), (32, 25462), (44, 25768), (52, 25942), (54, 26029), (62, 26185), (71, 26416), (75, 26458), (76, 26500), (84, 26722), (86, 26743), (89, 26779),

Gene: Odette\_38 Start: 29503, Stop: 31431, Start Num: 1

Candidate Starts for Odette\_38:

(Start: 1 @29503 has 23 MA's), (16, 29749), (24, 29887), (26, 29923), (29, 29971), (38, 30127), (40, 30217), (42, 30256), (44, 30322), (45, 30334), (46, 30337), (47, 30367), (50, 30427), (54, 30574), (56, 30595), (60, 30712), (63, 30772), (64, 30793), (68, 30871), (72, 31009), (75, 31057), (78, 31117), (81, 31171), (82, 31237), (84, 31318),

Gene: Ohno789\_31 Start: 23971, Stop: 25824, Start Num: 2

Candidate Starts for Ohno789\_31:

(Start: 2 @23971 has 206 MA's), (3, 23989), (5, 24052), (9, 24118), (17, 24187), (21, 24235), (22, 24262), (25, 24340), (30, 24415), (32, 24448), (35, 24499), (44, 24754), (52, 24928), (54, 25015), (62, 25171), (64, 25231), (69, 25357), (71, 25402), (75, 25444), (76, 25486), (84, 25708), (86, 25729), (89, 25765),

Gene: Oogway\_30 Start: 24093, Stop: 25946, Start Num: 2

Candidate Starts for Oogway\_30:

(Start: 2 @24093 has 206 MA's), (5, 24174), (9, 24240), (17, 24309), (21, 24357), (22, 24384), (25, 24462), (27, 24498), (32, 24570), (44, 24876), (52, 25050), (54, 25137), (62, 25293), (71, 25524), (75, 25566), (76, 25608), (84, 25830), (86, 25851), (89, 25887),

Gene: PSullivan\_33 Start: 24641, Stop: 26494, Start Num: 2

Candidate Starts for PSullivan\_33:

(Start: 2 @24641 has 206 MA's), (5, 24722), (9, 24788), (17, 24857), (21, 24905), (25, 25010), (27, 25046), (32, 25118), (44, 25424), (48, 25526), (52, 25598), (54, 25685), (62, 25841), (71, 26072), (75, 26114), (76, 26156), (84, 26378), (89, 26435),

Gene: PacerPaul\_31 Start: 24325, Stop: 26178, Start Num: 2

Candidate Starts for PacerPaul\_31:

(Start: 2 @24325 has 206 MA's), (5, 24406), (9, 24472), (17, 24541), (21, 24589), (22, 24616), (23, 24652), (25, 24694), (27, 24730), (32, 24802), (44, 25108), (48, 25210), (52, 25282), (54, 25369), (62, 25525), (71, 25756), (74, 25795), (75, 25798), (76, 25840), (84, 26062), (86, 26083), (89, 26119),

Gene: Papez\_33 Start: 25809, Stop: 27662, Start Num: 2

Candidate Starts for Papez\_33:

(Start: 2 @25809 has 206 MA's), (5, 25890), (9, 25956), (17, 26025), (21, 26073), (22, 26100), (25, 26178), (32, 26286), (44, 26592), (52, 26766), (54, 26853), (62, 27009), (69, 27195), (71, 27240), (75, 27282), (76, 27324), (84, 27546), (89, 27603),

Gene: Paphu\_30 Start: 23838, Stop: 25694, Start Num: 2

Candidate Starts for Paphu\_30:

(Start: 2 @23838 has 206 MA's), (5, 23919), (9, 23985), (17, 24054), (21, 24102), (22, 24129), (25, 24207), (27, 24243), (32, 24315), (44, 24621), (52, 24795), (54, 24885), (62, 25041), (71, 25272), (75, 25314), (76, 25356), (84, 25578), (89, 25635),

Gene: Paraselene\_30 Start: 24313, Stop: 26166, Start Num: 2

Candidate Starts for Paraselene\_30:

(Start: 2 @24313 has 206 MA's), (3, 24331), (5, 24394), (8, 24457), (9, 24460), (17, 24529), (21, 24577), (22, 24604), (25, 24682), (30, 24757), (32, 24790), (35, 24841), (42, 25030), (44, 25096), (52, 25270), (54, 25357), (62, 25513), (71, 25744), (75, 25786), (76, 25828), (84, 26050), (89, 26107),

Gene: Pari\_32 Start: 23845, Stop: 25698, Start Num: 2

Candidate Starts for Pari\_32:

(Start: 2 @23845 has 206 MA's), (3, 23863), (5, 23926), (9, 23992), (17, 24061), (21, 24109), (22, 24136), (25, 24214), (27, 24250), (30, 24289), (32, 24322), (35, 24373), (44, 24628), (52, 24802), (54, 24889), (62, 25045), (69, 25231), (71, 25276), (75, 25318), (76, 25360), (84, 25582), (86, 25603), (89, 25639),

Gene: Parliament\_30 Start: 24180, Stop: 26033, Start Num: 2

Candidate Starts for Parliament\_30:

(Start: 2 @24180 has 206 MA's), (5, 24261), (9, 24327), (17, 24396), (21, 24444), (22, 24471), (25, 24549), (30, 24624), (32, 24657), (35, 24708), (44, 24963), (52, 25137), (54, 25224), (62, 25380), (71, 25611), (75, 25653), (76, 25695), (84, 25917), (86, 25938), (89, 25974),

Gene: PascalRango\_32 Start: 24148, Stop: 26001, Start Num: 2

Candidate Starts for PascalRango\_32:

(Start: 2 @24148 has 206 MA's), (3, 24166), (5, 24229), (9, 24295), (17, 24364), (18, 24367), (21, 24412), (22, 24439), (23, 24475), (25, 24517), (27, 24553), (32, 24625), (44, 24931), (52, 25105), (54, 25192), (62, 25348), (71, 25579), (75, 25621), (76, 25663), (84, 25885), (86, 25906), (89, 25942),

Gene: PattyP\_33 Start: 24381, Stop: 26234, Start Num: 2

Candidate Starts for PattyP\_33:

(Start: 2 @24381 has 206 MA's), (5, 24462), (9, 24528), (17, 24597), (21, 24645), (22, 24672), (23, 24708), (25, 24750), (27, 24786), (32, 24858), (44, 25164), (48, 25266), (52, 25338), (54, 25425), (62, 25581), (71, 25812), (75, 25854), (76, 25896), (84, 26118), (89, 26175),

Gene: Payneful\_31 Start: 23629, Stop: 25482, Start Num: 2

Candidate Starts for Payneful\_31:

(Start: 2 @23629 has 206 MA's), (5, 23710), (9, 23776), (17, 23845), (21, 23893), (22, 23920), (23, 23956), (25, 23998), (27, 24034), (32, 24106), (44, 24412), (52, 24586), (54, 24673), (60, 24808), (62, 24829), (71, 25060), (75, 25102), (76, 25144), (84, 25366), (89, 25423),

Gene: Pelly\_32 Start: 24800, Stop: 26653, Start Num: 2

Candidate Starts for Pelly\_32:

(Start: 2 @24800 has 206 MA's), (5, 24881), (9, 24947), (17, 25016), (21, 25064), (22, 25091), (25, 25169), (27, 25205), (32, 25277), (44, 25583), (52, 25757), (54, 25844), (62, 26000), (69, 26186), (71, 26231), (75, 26273), (76, 26315), (84, 26537), (89, 26594),

Gene: Pepe\_32 Start: 24982, Stop: 26835, Start Num: 2

Candidate Starts for Pepe\_32:

(Start: 2 @24982 has 206 MA's), (5, 25063), (9, 25129), (17, 25198), (21, 25246), (22, 25273), (25, 25351), (27, 25387), (32, 25459), (44, 25765), (48, 25867), (52, 25939), (54, 26026), (62, 26182), (71, 26413), (75, 26455), (76, 26497), (84, 26719), (87, 26764), (89, 26776),

Gene: Perseus\_33 Start: 24997, Stop: 26850, Start Num: 2

Candidate Starts for Perseus\_33:

(Start: 2 @24997 has 206 MA's), (5, 25078), (9, 25144), (17, 25213), (21, 25261), (25, 25366), (27, 25402), (32, 25474), (44, 25780), (52, 25954), (54, 26041), (62, 26197), (71, 26428), (75, 26470), (76, 26512), (84, 26734), (89, 26791),

Gene: Peterson\_34 Start: 26010, Stop: 27860, Start Num: 2

Candidate Starts for Peterson\_34:

(Start: 2 @26010 has 206 MA's), (5, 26091), (9, 26157), (12, 26181), (14, 26196), (21, 26274), (22, 26301), (26, 26394), (32, 26487), (33, 26505), (36, 26541), (39, 26598), (44, 26793), (61, 27198), (62, 27210), (75, 27483), (89, 27804),

Gene: Petp2012\_33 Start: 25052, Stop: 26905, Start Num: 2

Candidate Starts for Petp2012\_33:

(Start: 2 @25052 has 206 MA's), (5, 25133), (9, 25199), (17, 25268), (21, 25316), (22, 25343), (23, 25379), (25, 25421), (27, 25457), (32, 25529), (44, 25835), (48, 25937), (52, 26009), (54, 26096), (62, 26252), (71, 26483), (75, 26525), (76, 26567), (84, 26789), (86, 26810), (89, 26846),

Gene: Petruccio\_32 Start: 24510, Stop: 26363, Start Num: 2

Candidate Starts for Petruccio\_32:

(Start: 2 @24510 has 206 MA's), (5, 24591), (9, 24657), (17, 24726), (21, 24774), (22, 24801), (25, 24879), (27, 24915), (32, 24987), (44, 25293), (51, 25437), (52, 25467), (54, 25554), (62, 25710), (71, 25941), (75, 25983), (76, 26025), (84, 26247), (86, 26268), (89, 26304),

Gene: PherrisBueller\_32 Start: 23965, Stop: 25818, Start Num: 2

Candidate Starts for PherrisBueller\_32:

(Start: 2 @23965 has 206 MA's), (5, 24046), (9, 24112), (17, 24181), (21, 24229), (22, 24256), (23, 24292), (25, 24334), (27, 24370), (32, 24442), (44, 24748), (48, 24850), (52, 24922), (54, 25009), (62, 25165), (69, 25351), (71, 25396), (75, 25438), (76, 25480), (84, 25702), (89, 25759),

Gene: PhineBark\_31 Start: 24856, Stop: 26709, Start Num: 2

Candidate Starts for PhineBark\_31:

(Start: 2 @24856 has 206 MA's), (5, 24937), (9, 25003), (17, 25072), (21, 25120), (22, 25147), (23, 25183), (25, 25225), (27, 25261), (32, 25333), (44, 25639), (52, 25813), (54, 25900), (60, 26035), (62, 26056), (71, 26287), (75, 26329), (76, 26371), (84, 26593), (89, 26650),

Gene: Phlippers\_30 Start: 25181, Stop: 27034, Start Num: 2

Candidate Starts for Phlippers\_30:

(Start: 2 @25181 has 206 MA's), (5, 25262), (9, 25328), (17, 25397), (18, 25400), (21, 25445), (22, 25472), (23, 25508), (25, 25550), (27, 25586), (32, 25658), (44, 25964), (52, 26138), (54, 26225), (62, 26381), (71, 26612), (75, 26654), (76, 26696), (84, 26918), (86, 26939), (89, 26975),

Gene: Phoebus\_38 Start: 30512, Stop: 32440, Start Num: 1

Candidate Starts for Phoebus\_38:

(Start: 1 @30512 has 23 MA's), (11, 30707), (23, 30875), (26, 30932), (28, 30971), (31, 31001), (34, 31067), (42, 31265), (44, 31331), (47, 31376), (50, 31436), (55, 31595), (64, 31802), (73, 32045), (75, 32066), (78, 32126), (81, 32180), (82, 32246), (83, 32285), (89, 32384),

Gene: PhrostyMug\_31 Start: 24159, Stop: 26012, Start Num: 2

Candidate Starts for PhrostyMug\_31:

(Start: 2 @24159 has 206 MA's), (5, 24240), (9, 24306), (17, 24375), (21, 24423), (22, 24450), (25, 24528), (27, 24564), (32, 24636), (44, 24942), (52, 25116), (54, 25203), (62, 25359), (71, 25590), (75,

25632), (76, 25674), (84, 25896), (86, 25917), (89, 25953),

Gene: PinkPlastic\_30 Start: 23899, Stop: 25752, Start Num: 2

Candidate Starts for PinkPlastic\_30:

(Start: 2 @23899 has 206 MA's), (5, 23980), (9, 24046), (17, 24115), (21, 24163), (22, 24190), (25, 24268), (27, 24304), (32, 24376), (44, 24682), (52, 24856), (54, 24943), (62, 25099), (71, 25330), (75, 25372), (76, 25414), (84, 25636), (86, 25657), (89, 25693),

Gene: Pinto\_34 Start: 24712, Stop: 26565, Start Num: 2

Candidate Starts for Pinto\_34:

(Start: 2 @24712 has 206 MA's), (5, 24793), (9, 24859), (17, 24928), (21, 24976), (22, 25003), (25, 25081), (27, 25117), (32, 25189), (44, 25495), (52, 25669), (54, 25756), (62, 25912), (69, 26098), (71, 26143), (75, 26185), (76, 26227), (84, 26449), (87, 26494), (89, 26506),

Gene: Pippin\_33 Start: 24463, Stop: 26316, Start Num: 2

Candidate Starts for Pippin\_33:

(Start: 2 @24463 has 206 MA's), (5, 24544), (9, 24610), (17, 24679), (21, 24727), (22, 24754), (25, 24832), (27, 24868), (32, 24940), (44, 25246), (48, 25348), (49, 25357), (52, 25420), (54, 25507), (62, 25663), (71, 25894), (76, 25978), (84, 26200), (89, 26257),

Gene: Pita2\_33 Start: 24641, Stop: 26494, Start Num: 2

Candidate Starts for Pita2\_33:

(Start: 2 @24641 has 206 MA's), (5, 24722), (9, 24788), (17, 24857), (21, 24905), (25, 25010), (27, 25046), (32, 25118), (44, 25424), (48, 25526), (52, 25598), (54, 25685), (62, 25841), (71, 26072), (75, 26114), (76, 26156), (84, 26378), (89, 26435),

Gene: Pound\_40 Start: 31501, Stop: 33429, Start Num: 1

Candidate Starts for Pound\_40:

(Start: 1 @31501 has 23 MA's), (16, 31747), (24, 31885), (26, 31921), (29, 31969), (38, 32125), (40, 32215), (42, 32254), (44, 32320), (45, 32332), (46, 32335), (47, 32365), (50, 32425), (54, 32572), (56, 32593), (60, 32710), (63, 32770), (64, 32791), (68, 32869), (72, 33007), (75, 33055), (78, 33115), (81, 33169), (82, 33235), (84, 33316),

Gene: ProMouse\_30 Start: 24604, Stop: 26457, Start Num: 2

Candidate Starts for ProMouse\_30:

(Start: 2 @24604 has 206 MA's), (3, 24622), (5, 24685), (9, 24751), (17, 24820), (18, 24823), (21, 24868), (22, 24895), (23, 24931), (25, 24973), (27, 25009), (44, 25387), (52, 25561), (54, 25648), (62, 25804), (69, 25990), (71, 26035), (75, 26077), (76, 26119), (84, 26341), (86, 26362), (89, 26398),

Gene: QTRlifeCrisis\_31 Start: 24719, Stop: 26572, Start Num: 2

Candidate Starts for QTRlifeCrisis\_31:

(Start: 2 @24719 has 206 MA's), (5, 24800), (9, 24866), (17, 24935), (21, 24983), (22, 25010), (25, 25088), (27, 25124), (32, 25196), (44, 25502), (52, 25676), (54, 25763), (62, 25919), (69, 26105), (71, 26150), (75, 26192), (76, 26234), (84, 26456), (89, 26513),

Gene: Raid\_32 Start: 24168, Stop: 26021, Start Num: 2

Candidate Starts for Raid\_32:

(Start: 2 @24168 has 206 MA's), (5, 24249), (9, 24315), (17, 24384), (18, 24387), (21, 24432), (22, 24459), (23, 24495), (25, 24537), (27, 24573), (32, 24645), (44, 24951), (52, 25125), (54, 25212), (62, 25368), (71, 25599), (75, 25641), (76, 25683), (84, 25905), (87, 25950), (89, 25962),

Gene: Rearden\_33 Start: 26522, Stop: 28450, Start Num: 1

Candidate Starts for Rearden\_33:

(Start: 1 @26522 has 23 MA's), (16, 26768), (26, 26942), (29, 26990), (42, 27275), (44, 27341), (45, 27353), (46, 27356), (47, 27386), (50, 27446), (52, 27506), (54, 27593), (56, 27614), (60, 27731), (65, 27824), (66, 27851), (67, 27860), (68, 27890), (72, 28028), (73, 28055), (75, 28076), (78, 28136), (80, 28181), (81, 28190), (90, 28439),

Gene: Redno2\_37 Start: 29975, Stop: 31903, Start Num: 1

Candidate Starts for Redno2\_37:

(Start: 1 @29975 has 23 MA's), (11, 30170), (23, 30338), (26, 30395), (28, 30434), (31, 30464), (34, 30530), (42, 30728), (44, 30794), (47, 30839), (50, 30899), (55, 31058), (64, 31265), (73, 31508), (75, 31529), (78, 31589), (81, 31643), (82, 31709), (83, 31748), (89, 31847),

Gene: Rhynn\_31 Start: 24168, Stop: 26021, Start Num: 2

Candidate Starts for Rhynn\_31:

(Start: 2 @24168 has 206 MA's), (5, 24249), (9, 24315), (17, 24384), (21, 24432), (22, 24459), (25, 24537), (27, 24573), (32, 24645), (44, 24951), (52, 25125), (54, 25212), (62, 25368), (71, 25599), (75, 25641), (76, 25683), (84, 25905), (86, 25926), (89, 25962),

Gene: RidgeCB\_31 Start: 23896, Stop: 25749, Start Num: 2

Candidate Starts for RidgeCB\_31:

(Start: 2 @23896 has 206 MA's), (5, 23977), (9, 24043), (17, 24112), (21, 24160), (22, 24187), (23, 24223), (25, 24265), (27, 24301), (32, 24373), (44, 24679), (52, 24853), (54, 24940), (62, 25096), (69, 25282), (71, 25327), (75, 25369), (76, 25411), (84, 25633), (89, 25690),

Gene: Ringer\_31 Start: 24820, Stop: 26673, Start Num: 2

Candidate Starts for Ringer\_31:

(Start: 2 @24820 has 206 MA's), (5, 24901), (9, 24967), (17, 25036), (21, 25084), (22, 25111), (25, 25189), (27, 25225), (30, 25264), (35, 25348), (44, 25603), (52, 25777), (54, 25864), (62, 26020), (69, 26206), (71, 26251), (75, 26293), (76, 26335), (84, 26557), (87, 26602), (89, 26614),

Gene: Rohr\_32 Start: 24318, Stop: 26171, Start Num: 2

Candidate Starts for Rohr\_32:

(Start: 2 @24318 has 206 MA's), (5, 24399), (9, 24465), (17, 24534), (21, 24582), (22, 24609), (25, 24687), (27, 24723), (32, 24795), (44, 25101), (52, 25275), (54, 25362), (62, 25518), (71, 25749), (75, 25791), (76, 25833), (84, 26055), (86, 26076), (89, 26112),

Gene: Rubeus\_32 Start: 24203, Stop: 26056, Start Num: 2

Candidate Starts for Rubeus\_32:

(Start: 2 @24203 has 206 MA's), (5, 24284), (9, 24350), (17, 24419), (21, 24467), (22, 24494), (25, 24572), (30, 24647), (32, 24680), (35, 24731), (44, 24986), (52, 25160), (54, 25247), (62, 25403), (69, 25589), (71, 25634), (75, 25676), (76, 25718), (84, 25940), (86, 25961), (89, 25997),

Gene: Rufus\_32 Start: 24505, Stop: 26358, Start Num: 2

Candidate Starts for Rufus\_32:

(Start: 2 @24505 has 206 MA's), (3, 24523), (5, 24586), (9, 24652), (17, 24721), (21, 24769), (22, 24796), (25, 24874), (27, 24910), (32, 24982), (44, 25288), (52, 25462), (54, 25549), (62, 25705), (71, 25936), (75, 25978), (76, 26020), (84, 26242), (89, 26299),

Gene: Ruotula\_30 Start: 24709, Stop: 26562, Start Num: 2

Candidate Starts for Ruotula\_30:

(Start: 2 @24709 has 206 MA's), (5, 24790), (9, 24856), (17, 24925), (21, 24973), (22, 25000), (25, 25078), (27, 25114), (32, 25186), (44, 25492), (52, 25666), (54, 25753), (62, 25909), (69, 26095), (71, 26140), (75, 26182), (76, 26224), (84, 26446), (89, 26503),



Gene: Rutherferd\_33 Start: 24774, Stop: 26627, Start Num: 2

Candidate Starts for Rutherferd\_33:

(Start: 2 @24774 has 206 MA's), (5, 24855), (9, 24921), (17, 24990), (21, 25038), (22, 25065), (23, 25101), (25, 25143), (27, 25179), (32, 25251), (44, 25557), (52, 25731), (54, 25818), (62, 25974), (69, 26160), (71, 26205), (75, 26247), (76, 26289), (84, 26511), (89, 26568),

Gene: STLscum\_32 Start: 24912, Stop: 26765, Start Num: 2

Candidate Starts for STLscum\_32:

(Start: 2 @24912 has 206 MA's), (5, 24993), (9, 25059), (17, 25128), (21, 25176), (22, 25203), (25, 25281), (27, 25317), (32, 25389), (44, 25695), (49, 25806), (52, 25869), (54, 25956), (62, 26112), (64, 26172), (69, 26298), (71, 26343), (75, 26385), (76, 26427), (84, 26649), (89, 26706),

Gene: Sagefire\_32 Start: 24945, Stop: 26798, Start Num: 2

Candidate Starts for Sagefire\_32:

(Start: 2 @24945 has 206 MA's), (5, 25026), (9, 25092), (17, 25161), (21, 25209), (22, 25236), (25, 25314), (27, 25350), (30, 25389), (32, 25422), (35, 25473), (44, 25728), (52, 25902), (54, 25989), (62, 26145), (71, 26376), (75, 26418), (76, 26460), (84, 26682), (89, 26739),

Gene: Sandaddy\_30 Start: 24058, Stop: 25911, Start Num: 2

Candidate Starts for Sandaddy\_30:

(Start: 2 @24058 has 206 MA's), (5, 24139), (9, 24205), (17, 24274), (21, 24322), (22, 24349), (25, 24427), (32, 24535), (44, 24841), (52, 25015), (54, 25102), (62, 25258), (69, 25444), (71, 25489), (75, 25531), (76, 25573), (84, 25795), (86, 25816), (89, 25852),

Gene: Sanya\_30 Start: 24742, Stop: 26595, Start Num: 2

Candidate Starts for Sanya\_30:

(Start: 2 @24742 has 206 MA's), (3, 24760), (5, 24823), (9, 24889), (17, 24958), (21, 25006), (22, 25033), (23, 25069), (25, 25111), (27, 25147), (32, 25219), (44, 25525), (52, 25699), (54, 25786), (62, 25942), (71, 26173), (75, 26215), (76, 26257), (84, 26479), (89, 26536),

Gene: SarFire\_31 Start: 24220, Stop: 26073, Start Num: 2

Candidate Starts for SarFire\_31:

(Start: 2 @24220 has 206 MA's), (5, 24301), (9, 24367), (17, 24436), (18, 24439), (21, 24484), (22, 24511), (23, 24547), (25, 24589), (27, 24625), (32, 24697), (44, 25003), (52, 25177), (54, 25264), (62, 25420), (69, 25606), (71, 25651), (75, 25693), (76, 25735), (84, 25957), (89, 26014),

Gene: Schatzie\_36 Start: 29251, Stop: 31179, Start Num: 1

Candidate Starts for Schatzie\_36:

(Start: 1 @29251 has 23 MA's), (16, 29497), (24, 29635), (26, 29671), (29, 29719), (38, 29875), (40, 29965), (42, 30004), (44, 30070), (45, 30082), (46, 30085), (47, 30115), (50, 30175), (54, 30322), (56, 30343), (60, 30460), (63, 30520), (64, 30541), (68, 30619), (72, 30757), (75, 30805), (78, 30865), (81, 30919), (82, 30985), (84, 31066),

Gene: Seabiscuit\_33 Start: 24126, Stop: 25979, Start Num: 2

Candidate Starts for Seabiscuit\_33:

(Start: 2 @24126 has 206 MA's), (5, 24207), (9, 24273), (17, 24342), (21, 24390), (22, 24417), (23, 24453), (25, 24495), (27, 24531), (32, 24603), (44, 24909), (48, 25011), (52, 25083), (54, 25170), (62, 25326), (71, 25557), (75, 25599), (76, 25641), (84, 25863), (86, 25884), (89, 25920),

Gene: Seanderson\_32 Start: 24600, Stop: 26453, Start Num: 2

Candidate Starts for Seanderson\_32:

(Start: 2 @24600 has 206 MA's), (5, 24681), (6, 24705), (9, 24747), (17, 24816), (21, 24864), (22, 24891), (25, 24969), (27, 25005), (32, 25077), (44, 25383), (52, 25557), (54, 25644), (62, 25800), (71,

26031), (75, 26073), (76, 26115), (84, 26337), (89, 26394),

Gene: ShortQueendom\_30 Start: 24040, Stop: 25893, Start Num: 2

Candidate Starts for ShortQueendom\_30:

(Start: 2 @24040 has 206 MA's), (5, 24121), (9, 24187), (17, 24256), (21, 24304), (22, 24331), (25, 24409), (27, 24445), (32, 24517), (44, 24823), (52, 24997), (54, 25084), (58, 25183), (62, 25240), (64, 25300), (71, 25471), (75, 25513), (76, 25555), (84, 25777), (89, 25834),

Gene: Sibs6\_33 Start: 24685, Stop: 26538, Start Num: 2

Candidate Starts for Sibs6\_33:

(Start: 2 @24685 has 206 MA's), (5, 24766), (9, 24832), (17, 24901), (21, 24949), (22, 24976), (25, 25054), (27, 25090), (32, 25162), (44, 25468), (52, 25642), (54, 25729), (62, 25885), (69, 26071), (71, 26116), (75, 26158), (76, 26200), (84, 26422), (86, 26443), (89, 26479),

Gene: SkiPole\_33 Start: 24424, Stop: 26277, Start Num: 2

Candidate Starts for SkiPole\_33:

(Start: 2 @24424 has 206 MA's), (5, 24505), (9, 24571), (17, 24640), (18, 24643), (21, 24688), (22, 24715), (23, 24751), (25, 24793), (27, 24829), (30, 24868), (32, 24901), (35, 24952), (44, 25207), (52, 25381), (54, 25468), (62, 25624), (69, 25810), (71, 25855), (75, 25897), (76, 25939), (84, 26161), (86, 26182), (89, 26218),

Gene: Slagathor\_32 Start: 24085, Stop: 25938, Start Num: 2

Candidate Starts for Slagathor\_32:

(Start: 2 @24085 has 206 MA's), (5, 24166), (9, 24232), (17, 24301), (21, 24349), (22, 24376), (25, 24454), (27, 24490), (32, 24562), (44, 24868), (52, 25042), (54, 25129), (62, 25285), (69, 25471), (71, 25516), (75, 25558), (76, 25600), (79, 25660), (84, 25822), (86, 25843), (89, 25879),

Gene: Smairt\_32 Start: 24813, Stop: 26666, Start Num: 2

Candidate Starts for Smairt\_32:

(Start: 2 @24813 has 206 MA's), (5, 24894), (9, 24960), (17, 25029), (18, 25032), (21, 25077), (22, 25104), (23, 25140), (25, 25182), (27, 25218), (32, 25290), (44, 25596), (52, 25770), (54, 25857), (62, 26013), (69, 26199), (71, 26244), (75, 26286), (76, 26328), (84, 26550), (89, 26607),

Gene: Smeagol\_33 Start: 25439, Stop: 27289, Start Num: 2

Candidate Starts for Smeagol\_33:

(Start: 2 @25439 has 206 MA's), (5, 25520), (9, 25586), (21, 25703), (22, 25730), (26, 25823), (32, 25916), (33, 25934), (36, 25970), (39, 26027), (44, 26222), (49, 26333), (61, 26627), (62, 26639), (75, 26912), (89, 27233),

Gene: Snazzy\_30 Start: 23999, Stop: 25852, Start Num: 2

Candidate Starts for Snazzy\_30:

(Start: 2 @23999 has 206 MA's), (5, 24080), (9, 24146), (17, 24215), (21, 24263), (22, 24290), (25, 24368), (27, 24404), (30, 24443), (32, 24476), (35, 24527), (44, 24782), (52, 24956), (54, 25043), (62, 25199), (71, 25430), (75, 25472), (76, 25514), (84, 25736), (89, 25793),

Gene: Solon\_31 Start: 24711, Stop: 26564, Start Num: 2

Candidate Starts for Solon\_31:

(Start: 2 @24711 has 206 MA's), (5, 24792), (9, 24858), (17, 24927), (21, 24975), (22, 25002), (25, 25080), (27, 25116), (32, 25188), (44, 25494), (52, 25668), (54, 25755), (62, 25911), (64, 25971), (69, 26097), (71, 26142), (75, 26184), (76, 26226), (84, 26448), (86, 26469), (89, 26505),

Gene: Sorpresa\_31 Start: 24058, Stop: 25911, Start Num: 2

Candidate Starts for Sorpresa\_31:

(Start: 2 @24058 has 206 MA's), (5, 24139), (9, 24205), (17, 24274), (21, 24322), (22, 24349), (25, 24427), (32, 24535), (44, 24841), (52, 25015), (54, 25102), (62, 25258), (69, 25444), (71, 25489), (75, 25531), (76, 25573), (84, 25795), (86, 25816), (89, 25852),

Gene: SpikeBT\_33 Start: 25016, Stop: 26869, Start Num: 2

Candidate Starts for SpikeBT\_33:

(Start: 2 @25016 has 206 MA's), (5, 25097), (9, 25163), (17, 25232), (21, 25280), (22, 25307), (25, 25385), (27, 25421), (32, 25493), (44, 25799), (48, 25901), (52, 25973), (54, 26060), (62, 26216), (71, 26447), (75, 26489), (76, 26531), (84, 26753), (86, 26774), (89, 26810),

Gene: Squee\_32 Start: 24965, Stop: 26818, Start Num: 2

Candidate Starts for Squee\_32:

(Start: 2 @24965 has 206 MA's), (5, 25046), (9, 25112), (17, 25181), (21, 25229), (22, 25256), (25, 25334), (44, 25748), (52, 25922), (54, 26009), (62, 26165), (71, 26396), (75, 26438), (76, 26480), (84, 26702), (89, 26759),

Gene: StewieG\_30 Start: 23901, Stop: 25754, Start Num: 2

Candidate Starts for StewieG\_30:

(Start: 2 @23901 has 206 MA's), (5, 23982), (9, 24048), (17, 24117), (21, 24165), (25, 24270), (27, 24306), (32, 24378), (44, 24684), (48, 24786), (52, 24858), (54, 24945), (62, 25101), (71, 25332), (75, 25374), (76, 25416), (77, 25419), (84, 25638), (86, 25659), (89, 25695),

Gene: StrongArm\_30 Start: 25100, Stop: 26953, Start Num: 2

Candidate Starts for StrongArm\_30:

(Start: 2 @25100 has 206 MA's), (5, 25181), (9, 25247), (17, 25316), (21, 25364), (22, 25391), (25, 25469), (27, 25505), (32, 25577), (44, 25883), (52, 26057), (54, 26144), (62, 26300), (71, 26531), (75, 26573), (76, 26615), (84, 26837), (89, 26894),

Gene: Sumter\_30 Start: 23649, Stop: 25502, Start Num: 2

Candidate Starts for Sumter\_30:

(Start: 2 @23649 has 206 MA's), (5, 23730), (9, 23796), (17, 23865), (21, 23913), (22, 23940), (25, 24018), (32, 24126), (44, 24432), (52, 24606), (54, 24693), (62, 24849), (69, 25035), (71, 25080), (75, 25122), (76, 25164), (84, 25386), (89, 25443),

Gene: Sunshine924\_32 Start: 23930, Stop: 25783, Start Num: 2

Candidate Starts for Sunshine924\_32:

(Start: 2 @23930 has 206 MA's), (3, 23948), (5, 24011), (9, 24077), (17, 24146), (18, 24149), (21, 24194), (22, 24221), (23, 24257), (25, 24299), (27, 24335), (32, 24407), (44, 24713), (52, 24887), (54, 24974), (62, 25130), (69, 25316), (71, 25361), (75, 25403), (76, 25445), (84, 25667), (86, 25688), (89, 25724),

Gene: SwissCheese\_33 Start: 24828, Stop: 26681, Start Num: 2

Candidate Starts for SwissCheese\_33:

(Start: 2 @24828 has 206 MA's), (5, 24909), (9, 24975), (17, 25044), (18, 25047), (21, 25092), (22, 25119), (23, 25155), (25, 25197), (27, 25233), (32, 25305), (44, 25611), (52, 25785), (54, 25872), (58, 25971), (62, 26028), (71, 26259), (75, 26301), (76, 26343), (84, 26565), (86, 26586), (89, 26622),

Gene: Switzer\_32 Start: 24232, Stop: 26085, Start Num: 2

Candidate Starts for Switzer\_32:

(Start: 2 @24232 has 206 MA's), (5, 24313), (9, 24379), (17, 24448), (21, 24496), (22, 24523), (25, 24601), (27, 24637), (32, 24709), (44, 25015), (52, 25189), (54, 25276), (62, 25432), (71, 25663), (75, 25705), (76, 25747), (84, 25969), (89, 26026),

Gene: Swole\_33 Start: 24641, Stop: 26494, Start Num: 2

Candidate Starts for Swole\_33:

(Start: 2 @24641 has 206 MA's), (5, 24722), (9, 24788), (17, 24857), (21, 24905), (22, 24932), (25, 25010), (27, 25046), (32, 25118), (44, 25424), (48, 25526), (52, 25598), (54, 25685), (62, 25841), (71, 26072), (75, 26114), (76, 26156), (84, 26378), (89, 26435),

Gene: Target\_34 Start: 25615, Stop: 27468, Start Num: 2

Candidate Starts for Target\_34:

(Start: 2 @25615 has 206 MA's), (5, 25696), (9, 25762), (17, 25831), (21, 25879), (22, 25906), (25, 25984), (27, 26020), (32, 26092), (44, 26398), (52, 26572), (54, 26659), (59, 26761), (62, 26815), (71, 27046), (75, 27088), (76, 27130), (84, 27352), (89, 27409),

Gene: Tasp14\_32 Start: 24345, Stop: 26186, Start Num: 2

Candidate Starts for Tasp14\_32:

(Start: 2 @24345 has 206 MA's), (5, 24426), (9, 24492), (17, 24561), (21, 24609), (22, 24636), (25, 24714), (30, 24789), (32, 24822), (35, 24873), (44, 25128), (52, 25302), (54, 25389), (62, 25545), (69, 25731), (71, 25776), (75, 25818), (76, 25860), (84, 26082), (85, 26091), (89, 26127),

Gene: Teodoridan\_29 Start: 23466, Stop: 25316, Start Num: 2

Candidate Starts for Teodoridan\_29:

(Start: 2 @23466 has 206 MA's), (5, 23547), (9, 23613), (17, 23682), (21, 23730), (22, 23757), (25, 23835), (27, 23871), (32, 23943), (44, 24249), (52, 24423), (54, 24510), (59, 24612), (62, 24666), (71, 24897), (75, 24939), (76, 24981), (84, 25203), (86, 25224), (89, 25260),

Gene: TheloniousMonk\_33 Start: 25759, Stop: 27612, Start Num: 2

Candidate Starts for TheloniousMonk\_33:

(Start: 2 @25759 has 206 MA's), (5, 25840), (9, 25906), (17, 25975), (21, 26023), (22, 26050), (25, 26128), (27, 26164), (32, 26236), (44, 26542), (52, 26716), (54, 26803), (62, 26959), (69, 27145), (71, 27190), (75, 27232), (76, 27274), (84, 27496), (89, 27553),

Gene: Thibault\_35 Start: 30372, Stop: 32300, Start Num: 1

Candidate Starts for Thibault\_35:

(Start: 1 @30372 has 23 MA's), (11, 30567), (23, 30735), (26, 30792), (30, 30852), (31, 30861), (41, 31089), (42, 31125), (44, 31191), (49, 31293), (50, 31296), (60, 31581), (64, 31662), (72, 31878), (73, 31905), (75, 31926), (78, 31986), (81, 32040), (82, 32106),

Gene: Thor\_31 Start: 24220, Stop: 26073, Start Num: 2

Candidate Starts for Thor\_31:

(Start: 2 @24220 has 206 MA's), (5, 24301), (9, 24367), (17, 24436), (18, 24439), (21, 24484), (22, 24511), (23, 24547), (25, 24589), (27, 24625), (32, 24697), (44, 25003), (52, 25177), (54, 25264), (62, 25420), (69, 25606), (71, 25651), (75, 25693), (76, 25735), (84, 25957), (89, 26014),

Gene: ThreeRngTarjay\_37 Start: 30362, Stop: 32290, Start Num: 1

Candidate Starts for ThreeRngTarjay\_37:

(Start: 1 @30362 has 23 MA's), (11, 30557), (23, 30725), (26, 30782), (28, 30821), (31, 30851), (34, 30917), (42, 31115), (44, 31181), (47, 31226), (50, 31286), (55, 31445), (64, 31652), (73, 31895), (75, 31916), (78, 31976), (81, 32030), (82, 32096), (83, 32135), (89, 32234),

Gene: Topgun\_31 Start: 23973, Stop: 25826, Start Num: 2

Candidate Starts for Topgun\_31:

(Start: 2 @23973 has 206 MA's), (5, 24054), (9, 24120), (17, 24189), (18, 24192), (21, 24237), (22, 24264), (23, 24300), (25, 24342), (27, 24378), (32, 24450), (44, 24756), (51, 24900), (52, 24930), (54, 25017), (62, 25173), (71, 25404), (75, 25446), (76, 25488), (84, 25710), (89, 25767),

Gene: Tote\_33 Start: 24641, Stop: 26494, Start Num: 2

Candidate Starts for Tote\_33:

(Start: 2 @24641 has 206 MA's), (5, 24722), (9, 24788), (17, 24857), (21, 24905), (22, 24932), (25, 25010), (27, 25046), (32, 25118), (44, 25424), (48, 25526), (52, 25598), (54, 25685), (62, 25841), (71, 26072), (75, 26114), (76, 26156), (84, 26378), (89, 26435),

Gene: Traft412\_33 Start: 25016, Stop: 26869, Start Num: 2

Candidate Starts for Traft412\_33:

(Start: 2 @25016 has 206 MA's), (5, 25097), (9, 25163), (17, 25232), (21, 25280), (22, 25307), (25, 25385), (27, 25421), (30, 25460), (32, 25493), (44, 25799), (48, 25901), (52, 25973), (54, 26060), (62, 26216), (64, 26276), (69, 26402), (71, 26447), (75, 26489), (76, 26531), (84, 26753), (89, 26810),

Gene: Treddle\_33 Start: 25306, Stop: 27159, Start Num: 2

Candidate Starts for Treddle\_33:

(Start: 2 @25306 has 206 MA's), (5, 25387), (9, 25453), (17, 25522), (21, 25570), (22, 25597), (23, 25633), (25, 25675), (27, 25711), (32, 25783), (44, 26089), (52, 26263), (54, 26350), (62, 26506), (69, 26692), (71, 26737), (75, 26779), (76, 26821), (84, 27043), (89, 27100),

Gene: Tripl3t\_32 Start: 24972, Stop: 26825, Start Num: 2

Candidate Starts for Tripl3t\_32:

(Start: 2 @24972 has 206 MA's), (5, 25053), (9, 25119), (17, 25188), (21, 25236), (22, 25263), (23, 25299), (25, 25341), (27, 25377), (32, 25449), (44, 25755), (52, 25929), (54, 26016), (62, 26172), (69, 26358), (71, 26403), (75, 26445), (76, 26487), (84, 26709), (89, 26766),

Gene: Trouble\_32 Start: 24919, Stop: 26772, Start Num: 2

Candidate Starts for Trouble\_32:

(Start: 2 @24919 has 206 MA's), (5, 25000), (9, 25066), (17, 25135), (21, 25183), (22, 25210), (23, 25246), (25, 25288), (27, 25324), (32, 25396), (44, 25702), (52, 25876), (54, 25963), (62, 26119), (71, 26350), (75, 26392), (76, 26434), (84, 26656), (89, 26713),

Gene: Turj99\_30 Start: 23859, Stop: 25712, Start Num: 2

Candidate Starts for Turj99\_30:

(Start: 2 @23859 has 206 MA's), (5, 23940), (9, 24006), (17, 24075), (21, 24123), (22, 24150), (25, 24228), (27, 24264), (32, 24336), (44, 24642), (49, 24753), (52, 24816), (54, 24903), (62, 25059), (69, 25245), (71, 25290), (75, 25332), (76, 25374), (84, 25596), (89, 25653),

Gene: TwoPeat\_32 Start: 24440, Stop: 26293, Start Num: 2

Candidate Starts for TwoPeat\_32:

(Start: 2 @24440 has 206 MA's), (5, 24521), (9, 24587), (17, 24656), (21, 24704), (22, 24731), (25, 24809), (27, 24845), (30, 24884), (32, 24917), (35, 24968), (44, 25223), (52, 25397), (54, 25484), (62, 25640), (69, 25826), (71, 25871), (75, 25913), (76, 25955), (84, 26177), (86, 26198), (89, 26234),

Gene: U2\_31 Start: 24238, Stop: 26091, Start Num: 2

Candidate Starts for U2\_31:

(Start: 2 @24238 has 206 MA's), (3, 24256), (5, 24319), (9, 24385), (17, 24454), (21, 24502), (22, 24529), (25, 24607), (27, 24643), (32, 24715), (44, 25021), (52, 25195), (54, 25282), (62, 25438), (69, 25624), (71, 25669), (75, 25711), (76, 25753), (84, 25975), (89, 26032),

Gene: Violet\_30 Start: 24645, Stop: 26498, Start Num: 2

Candidate Starts for Violet\_30:

(Start: 2 @24645 has 206 MA's), (5, 24726), (9, 24792), (17, 24861), (21, 24909), (22, 24936), (25, 25014), (27, 25050), (30, 25089), (32, 25122), (35, 25173), (44, 25428), (52, 25602), (54, 25689), (62,

25845), (71, 26076), (75, 26118), (76, 26160), (79, 26220), (84, 26382), (86, 26403), (89, 26439),

Gene: Watermelon\_33 Start: 24981, Stop: 26834, Start Num: 2

Candidate Starts for Watermelon\_33:

(Start: 2 @24981 has 206 MA's), (5, 25062), (9, 25128), (17, 25197), (21, 25245), (22, 25272), (25, 25350), (27, 25386), (32, 25458), (44, 25764), (52, 25938), (54, 26025), (62, 26181), (69, 26367), (71, 26412), (75, 26454), (76, 26496), (84, 26718), (89, 26775),

Gene: Wheeler\_31 Start: 24413, Stop: 26266, Start Num: 2

Candidate Starts for Wheeler\_31:

(Start: 2 @24413 has 206 MA's), (5, 24494), (9, 24560), (17, 24629), (21, 24677), (22, 24704), (25, 24782), (27, 24818), (32, 24890), (44, 25196), (52, 25370), (54, 25457), (62, 25613), (69, 25799), (71, 25844), (75, 25886), (76, 25928), (84, 26150), (89, 26207),

Gene: Wilkins\_31 Start: 23904, Stop: 25757, Start Num: 2

Candidate Starts for Wilkins\_31:

(Start: 2 @23904 has 206 MA's), (5, 23985), (9, 24051), (17, 24120), (21, 24168), (22, 24195), (23, 24231), (25, 24273), (27, 24309), (32, 24381), (44, 24687), (52, 24861), (54, 24948), (62, 25104), (69, 25290), (71, 25335), (75, 25377), (76, 25419), (84, 25641), (89, 25698),

Gene: Yeet\_37 Start: 29496, Stop: 31424, Start Num: 1

Candidate Starts for Yeet\_37:

(Start: 1 @29496 has 23 MA's), (16, 29742), (24, 29880), (26, 29916), (29, 29964), (38, 30120), (40, 30210), (42, 30249), (44, 30315), (45, 30327), (46, 30330), (47, 30360), (50, 30420), (54, 30567), (56, 30588), (60, 30705), (63, 30765), (64, 30786), (68, 30864), (72, 31002), (75, 31050), (78, 31110), (81, 31164), (82, 31230), (84, 31311),

Gene: Zeeculate\_31 Start: 24852, Stop: 26705, Start Num: 2

Candidate Starts for Zeeculate\_31:

(Start: 2 @24852 has 206 MA's), (3, 24870), (5, 24933), (9, 24999), (17, 25068), (21, 25116), (22, 25143), (25, 25221), (32, 25329), (44, 25635), (52, 25809), (54, 25896), (62, 26052), (71, 26283), (75, 26325), (76, 26367), (84, 26589), (89, 26646),

Gene: Zelink\_40 Start: 31306, Stop: 33234, Start Num: 1

Candidate Starts for Zelink\_40:

(Start: 1 @31306 has 23 MA's), (11, 31501), (23, 31669), (26, 31726), (28, 31765), (31, 31795), (34, 31861), (42, 32059), (44, 32125), (47, 32170), (50, 32230), (55, 32389), (64, 32596), (73, 32839), (75, 32860), (78, 32920), (81, 32974), (82, 33040), (83, 33079), (89, 33178),

Gene: Zephyr\_31 Start: 24214, Stop: 26067, Start Num: 2

Candidate Starts for Zephyr\_31:

(Start: 2 @24214 has 206 MA's), (5, 24295), (9, 24361), (17, 24430), (21, 24478), (22, 24505), (25, 24583), (32, 24691), (44, 24997), (52, 25171), (54, 25258), (62, 25414), (69, 25600), (71, 25645), (75, 25687), (76, 25729), (84, 25951), (89, 26008),

Gene: Zeuska\_32 Start: 24648, Stop: 26501, Start Num: 2

Candidate Starts for Zeuska\_32:

(Start: 2 @24648 has 206 MA's), (5, 24729), (9, 24795), (17, 24864), (21, 24912), (25, 25017), (27, 25053), (32, 25125), (44, 25431), (48, 25533), (52, 25605), (54, 25692), (62, 25848), (71, 26079), (75, 26121), (76, 26163), (84, 26385), (86, 26406), (89, 26442),