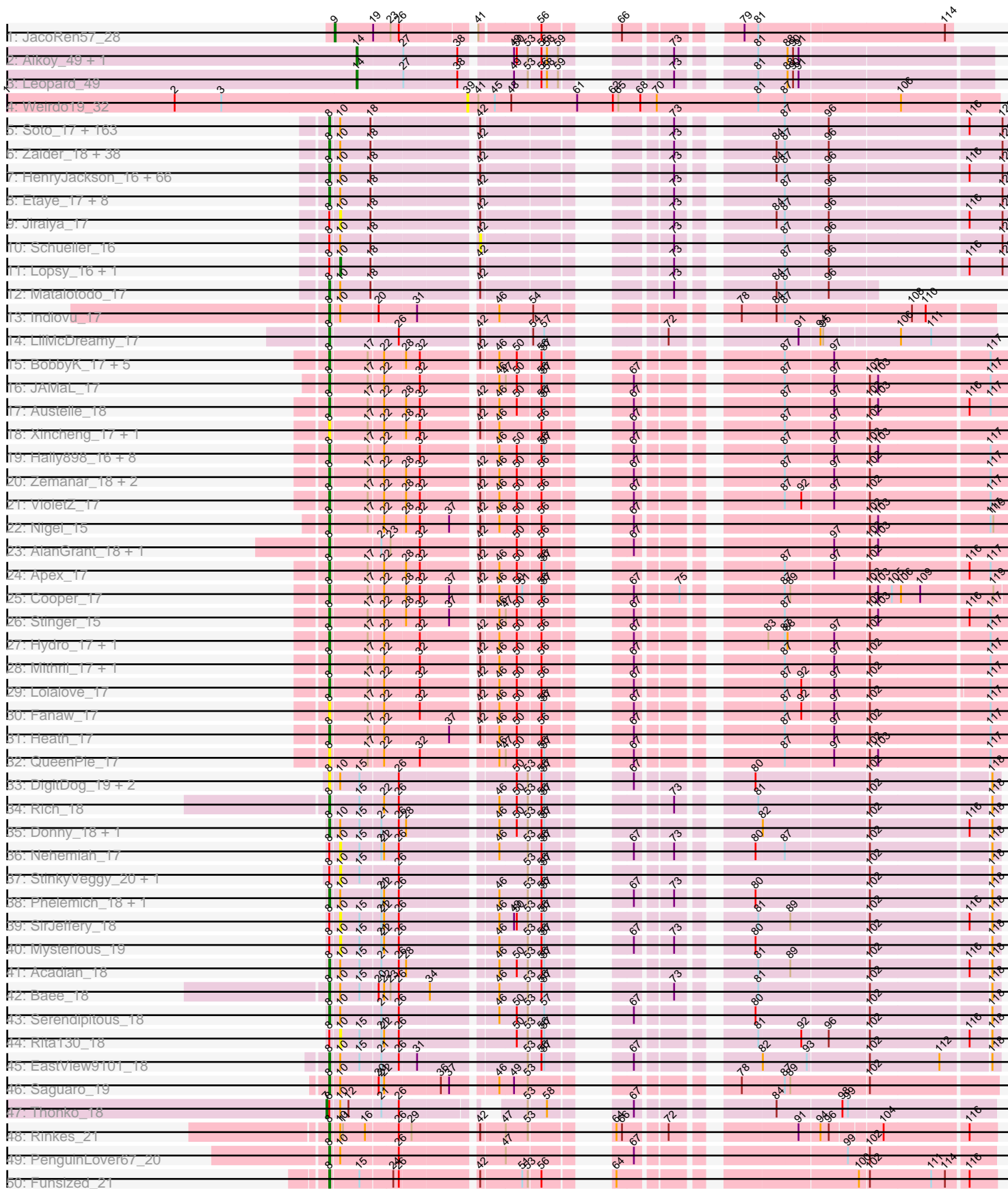


Pham 197755





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 197755 Report

This analysis was run 01/18/25 on database version 583.

Pham number 197755 has 449 members, 50 are drafts.

Phages represented in each track:

- Track 1 : JacoRen57\_28
- Track 2 : Aikoy\_49, Onyinye\_50
- Track 3 : Leopard\_49
- Track 4 : WeirDo19\_32
- Track 5 : Soto\_17, TallGrassMM\_17, HSavage\_17, Phergie\_16, Simielle\_16, Struggle\_16, Gyarad\_0017, Cornobble\_16, Vaishali24\_16, Phamished\_17, FluffyNinja\_17, Mesmerelda\_17, Gwilliam\_17, Yoshand\_17, Virgeve\_16, Vivaldi\_17, Plmatters\_17, Mcshane\_16, Newman\_17, Nacho\_0017, Hartsy\_17, CheetO\_17, Piglet\_0016, Xavier\_16, Squid\_17, Daffy\_17, Morty\_17, CamL\_17, Antonia\_16, Roscoe\_18, DelRivs\_16, BlueHusk\_17, KlimbOn\_17, Suffolk\_17, PhenghisKhan\_16, Grand2040\_16, ImtiyazSitla\_16, Kikipoo\_17, FugateOSU\_16, Jesabah\_17, PhrankReynolds\_16, Maru\_16, Aelin\_16, Maskar\_16, Labeouficaum\_16, CharlieGBrown\_16, MRabcd\_16, Placalicious\_16, BatteryCK\_16, Swish\_17, Haimas\_17, Gwennie1\_17, Pherdinand\_17, Jillium\_16, Nicole21\_17, Hetaeria\_17, Chorkpop\_17, Phleuron\_16, Derpp\_16, Orfeu\_16, Pinkman\_16, KLucky39\_17, Selr12\_17, Virapocalypse\_17, Childish\_16, Ricotta\_16, Soile\_17, Mulan\_16, Prickles\_17, MichaelPhcott\_16, Vaticameos\_17, AngelCake\_16, Kailash\_17, Iridessa\_16, Magic8\_17, Mana\_16, Zonia\_17, True\_16, TyrionL\_16, Boehler\_17, Olak\_16, JangoPhett\_17, OSmaximus\_17, Durga\_17, BlackStallion\_17, Bishoperium\_16, Mesh1\_17, Mecca\_16, UAch1\_17, AbsoluteMadLad\_16, TomBombadil\_17, Craff\_17, Gareth\_16, Chute\_16, Beaglebox\_16, Mag7\_16, FriarPreacher\_17, Cannibal\_17, Bluephacebaby\_16, Ashraf\_16, Freya\_16, Scrick\_16, Pacifista\_16, Chaelin\_16, Cobra\_17, Orion\_17, SassyCat97\_16, Emiris\_17, PG1\_17, Megatron\_17, QueenBeane\_17, Telesworld\_16, Giraffe\_17, Omniscient\_17, Hocus\_16, KingTut\_16, IsaacEli\_17, Potter\_16, Held\_17, Longacauda\_16, Lego3393\_17, Kimbrough\_17, Roliet\_17, Anderson\_17, Harvey\_17, Tomlarah\_17, Nyala\_16, LemonSlice\_17, Phareon\_17, MitKao\_17, Inverness\_17, Hertubise\_17, Jiminy\_16, Samaymay\_17, Banjo\_16, Windsor\_16, DonSanchon\_16, Thora\_17, HighStump\_16, LasagnaCat\_17, Altwerkus\_16, Frankicide\_17, Eremos\_17, LuckyMarjie\_16, Daka\_17, Katniss\_17, Orwigg\_17, Oline\_16, Cher\_16, Colbert\_17, Brilliant\_17, Veritas\_16, Skippy\_17, Coletti\_16, LeiMonet\_17, YouGoGlencoco\_17, Eugenia\_17, Serpentine\_0017, Cosmolli16\_16, ShiVal\_17, Chah\_17, Kloppinator\_17, PhatCats2014\_17, Nathan\_18
- Track 6 : Zaider\_18, JacAttac\_17, Khan1\_17, ABU\_17, Vista\_17, Rimu\_16, Solosis\_16, Roy17\_17, Serendipity\_17, Olive\_17, PhatLouie\_17, DuchessDung\_16, MrPhizzler\_16, Pipsqueak\_17, UncleHowie\_17, Morgushi\_17, Timmi\_16, PinheadLarry\_17, Sigman\_17, MelsMeow\_16, Wallhey\_16, Phipps\_17, Kwadwo\_16,

Waterdiva\_17, Kwksand96\_16, Scoot17C\_17, ProfessorX\_17, Lulumae\_16, Vortex\_17, Lumine\_16, Oosterbaan\_17, Legolas\_16, GeneCoco\_17, Adriana\_17, Apizium\_16, Dice\_16, Trypo\_17, Puhltonio\_17, Swiphy\_17

- Track 7 : HenryJackson\_16, Podrick\_17, Fringe\_17, Numberten\_17, Carthage\_16, Andre\_17, OliverWalter\_17, Doddsville\_17, Dione\_16, Toni\_16, JakeO\_16, Spartan300\_17, Mosaic\_16, Hamish\_17, Mikota\_17, ThreeOh3D2\_17, Dati\_17, Mutante\_16, Keitherie\_17, Crownjwl\_17, Inchworm\_17, DirtJuice\_17, Slatt\_17, Burr\_16, Valjean\_17, MiniBoss\_17, Duggie\_16, Gophee\_17, Iridoclysis\_17, Horchata\_17, DaddyDaniels\_17, Thunderbird\_16, DoesntMatter\_17, SDcharge11\_17, Riggan\_17, Fang\_17, Quisquilliae\_17, Manad\_16, PhrodoBaggins\_16, JDog\_16, Lasso\_17, Sheila\_17, LostAndPhound\_16, Schadenfreude\_16, Tooj\_17, Haleema\_16, Robyn\_16, AltPhacts\_17, Lulwa\_17, Charles1\_17, Chunky\_17, Pops\_17, CampRoach\_17, Dingo\_17, Fozzie\_16, EmpTee\_17, Badfish\_17, Basato\_18, Buckeye\_17, RedMaple\_16, Kahve\_16, Usavi\_17, Phunky\_17, Squiggle\_17, Megamind20\_17, KingVeVeVe\_17, Surely\_17
- Track 8 : Etaye\_17, Melc17\_17, Sophia\_16, LeeLot\_17, Murdoc\_17, SilverBell\_17, Caspiboi\_18, Zelda\_17, Weher20\_17
- Track 9 : Jiraiya\_17
- Track 10 : Schueller\_16
- Track 11 : Lopsy\_16, ElvisPhasley\_17
- Track 12 : Matalotodo\_17
- Track 13 : Indlovu\_17
- Track 14 : LilMcDreamy\_17
- Track 15 : BobbyK\_17, Fortunato\_17, Magpie\_17, Mudslide\_17, Frederick\_17, Prince\_17
- Track 16 : JAMaL\_17
- Track 17 : Austelle\_18
- Track 18 : Xincheng\_17, JaguarMi\_18
- Track 19 : Hally898\_16, Nanao\_16, GinPorsche\_16, Lambano\_16, ChrisnMich\_16, Epah\_16, Poster\_16, Antihero\_16, Ahwei\_16
- Track 20 : Zemanar\_18, RawrgerThat\_17, Waleliano\_17
- Track 21 : VioletZ\_17
- Track 22 : Nigel\_15
- Track 23 : AlanGrant\_18, Vincenzo\_18
- Track 24 : Apex\_17
- Track 25 : Cooper\_17
- Track 26 : Stinger\_15
- Track 27 : Hydro\_17, Hangman\_17
- Track 28 : Mithril\_17, BrownCNA\_18
- Track 29 : Lolalove\_17
- Track 30 : Fanaw\_17
- Track 31 : Heath\_17
- Track 32 : QueenPie\_17
- Track 33 : DigitDog\_19, Shenyu\_18, Nangang\_18
- Track 34 : Rich\_18
- Track 35 : Donny\_18, Suigeneris\_18
- Track 36 : Nehemiah\_17
- Track 37 : StinkyVeggy\_20, KarasumaRum\_20
- Track 38 : Phelemich\_18, Reprobate\_18
- Track 39 : SirJeffery\_18
- Track 40 : Mysterious\_19
- Track 41 : Acadian\_18
- Track 42 : Bae\_18

- Track 43 : Serendipitous\_18
- Track 44 : Rita130\_18
- Track 45 : EastView9101\_18
- Track 46 : Saguaro\_19
- Track 47 : Thonko\_18
- Track 48 : Rinkes\_21
- Track 49 : PenguinLover67\_20
- Track 50 : Funsized\_21
- Track 51 : Knocker\_21
- Track 52 : BruceB\_31, Sweets\_31, Halo\_31, Kareem\_31, Frosty24\_31, Zombie\_31, Crespo\_31, Darionha\_31, Kasen3\_31, Camri\_31, JorRay\_31, Phreak\_31, Gomashi\_31, CLED96\_31, Olga\_31, ZoMa\_31, Mowgli\_31, Annihilator\_31, ShaboiShabazz\_31, Jane\_31, Wendigo\_31, PinkYoshi\_31, Phish\_31, CassieYates\_31, Angel\_31, TinaBug\_31, GoldenAsh\_31, Hope\_31, Remy19\_31, TomBrady\_31, Marmie\_31, OctaviousRex\_31, Renaissance\_31, Gideon\_31, Avrafan\_31, Schiebel\_31, Sizemore\_31, BQuat\_31, Barkley26\_31, Coleslaw\_31, BPs\_31, Maliketh\_31, AzulaCat\_31, Cedasite\_31, LouisV14\_31, Plagueis\_31, DMoney\_31
- Track 53 : Rabbs\_31, Chance64\_31, Sneeze\_31, Jonghyun\_31, Jolene\_31, ECartman\_31, Periodt\_31, Hotshotbaby7\_31, Aroostook\_31, Liefie\_31
- Track 54 : Peeb\_31
- Track 55 : Cherrybomb426\_31
- Track 56 : Grizzly\_31
- Track 57 : Taheera\_31, Terror\_31
- Track 58 : Paito\_31
- Track 59 : DNAIII\_0031
- Track 60 : FlagStaff\_30, Pace1224\_30
- Track 61 : Cambiare\_31
- Track 62 : Avocado\_30
- Track 63 : MOOREtheMARYer\_32
- Track 64 : Pinnie\_32
- Track 65 : Jolie2\_31
- Track 66 : Lemuria\_32
- Track 67 : Mercurio\_33
- Track 68 : Antsirabe\_31
- Track 69 : Stargaze\_31
- Track 70 : Dewey\_35, Forge\_35, Hail\_35, Luna22\_35, Hadrien\_36, HH92\_35, Wishmaker\_35, OBUpride\_36, Amymech\_36, Webster2\_36, Luke\_36, Giles\_35, LilHazelNut\_36, Ubuntu\_36, DeepSoil15\_36, Kinbote\_36, Gancho\_35, Ein37\_36, Evanesce\_35
- Track 71 : Gravallia\_35
- Track 72 : Amochick\_36, Daegal\_37

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

The start number called the most often in the published annotations is 8, it was called in 334 of the 399 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ABU\_17, AbsoluteMadLad\_16, Acadian\_18, Adriana\_17, Aelin\_16, Ahwei\_16, AlanGrant\_18, AltPhacts\_17, Altwerkus\_16, Amochick\_36, Amymech\_36, Anderson\_17, Andre\_17, AngelCake\_16, Antihero\_16, Antonia\_16, Antsirabe\_31, Apex\_17, Apizium\_16, Ashraf\_16, Austelle\_18, Avocado\_30, Badfish\_17, Bae\_18, Banjo\_16, Basato\_18, BatteryCK\_16, Beaglebox\_16, Bishoperium\_16, BlackStallion\_17, BlueHusk\_17, Bluephacebaby\_16, BobbyK\_17, Boehler\_17, Brilliant\_17, BrownCNA\_18, Buckeye\_17, Burr\_16, CamL\_17, Cambiare\_31, CampRoach\_17, Cannibal\_17, Carthage\_16, Caspiboi\_18, Chaelin\_16, Chah\_17, Charles1\_17, CharlieGBrown\_16, CheetO\_17, Cher\_16, Childish\_16, Chorkpop\_17, ChrisnMich\_16, Chunky\_17, Chute\_16, Cobra\_17, Colbert\_17, Coletti\_16, Cooper\_17, Cornobble\_16, Cosmolli16\_16, Craff\_17, Crownjwl\_17, DaddyDaniels\_17, Daegal\_37, Daffy\_17, Daka\_17, Dati\_17, DeepSoil15\_36, DelRivs\_16, Derpp\_16, Dewey\_35, Dice\_16, DigitDog\_19, Dingo\_17, Dione\_16, DirtJuice\_17, Doddsville\_17, DoesntMatter\_17, DonSancho\_16, Donny\_18, DuchessDung\_16, Duggie\_16, Durga\_17, EastView9101\_18, Ein37\_36, Emiris\_17, EmpTee\_17, Epah\_16, Eremos\_17, Etaye\_17, Eugenia\_17, Evanesce\_35, Fanaw\_17, Fang\_17, FlagStaff\_30, FluffyNinja\_17, Forge\_35, Fortunato\_17, Fozzie\_16, Frankicide\_17, Frederick\_17, Freya\_16, FriarPreacher\_17, Fringe\_17, FugateOSU\_16, Funsized\_21, Gancho\_35, Gareth\_16, GeneCoco\_17, Giles\_35, GinPorsche\_16, Giraffe\_17, Gophee\_17, Grand2040\_16, Gravallia\_35, Gwennie1\_17, Gwilliam\_17, Gyarad\_0017, HH92\_35, HSavage\_17, Hadrien\_36, Hail\_35, Haimas\_17, Haleema\_16, Hally898\_16, Hamish\_17, Hangman\_17, Hartsy\_17, Harvey\_17, Heath\_17, Held\_17, HenryJackson\_16, Hertubise\_17, Hetaeria\_17, HighStump\_16, Hocus\_16, Horchata\_17, Hydro\_17, ImtiyazSitla\_16, Inchworm\_17, Indlovu\_17, Inverness\_17, Iridessa\_16, Iridoclysis\_17, IsaacEli\_17, JAMaL\_17, JDog\_16, JacAttac\_17, JaguarMi\_18, JakeO\_16, JangoPhett\_17, Jesabah\_17, Jillium\_16, Jiminy\_16, Jolie2\_31, KLucky39\_17, Kahve\_16, Kailash\_17, Katniss\_17, Keitherie\_17, Khan1\_17, Kikipoo\_17, Kimbrough\_17, Kinbote\_36, KingTut\_16, KingVeVeVe\_17, KlimbOn\_17, Kloppinator\_17, Knocker\_21, Kwadwo\_16, Kwksand96\_16, Labeoufcaum\_16, Lambano\_16, LasagnaCat\_17, Lasso\_17, LeeLot\_17, Lego3393\_17, Legolas\_16, LeiMonet\_17, LemonSlice\_17, Lemuria\_32, LilHazelNut\_36, LilMcDreamy\_17, Lolalove\_17, Longacauda\_16, LostAndPhound\_16, LuckyMarjie\_16, Luke\_36, Lulumae\_16, Lulwa\_17, Lumine\_16, Luna22\_35, MOOREtheMARYer\_32, MRabcd\_16, Mag7\_16, Magic8\_17, Magpie\_17, Mana\_16, Manad\_16, Maru\_16, Maskar\_16, Matalotodo\_17, Mcshane\_16, Mecca\_16, Megamind20\_17, Megatron\_17, Melc17\_17, MelsMeow\_16, Mercurio\_33, Mesh1\_17, Mesmerelda\_17, MichaelPhcott\_16, Mikota\_17, MiniBoss\_17, MitKao\_17, Mithril\_17, Morgushi\_17, Morty\_17, Mosaic\_16, MrPhizzler\_16, Mudslide\_17, Mulan\_16, Murdoc\_17, Mutante\_16, Nacho\_0017, Nanao\_16, Nangang\_18, Nathan\_18, Newman\_17, Nicole21\_17, Nigel\_15, Numberten\_17, Nyala\_16, OBUpride\_36, OSmaximus\_17, Olak\_16, Oline\_16, Olive\_17, OliverWalter\_17, Omniscient\_17, Oosterbaan\_17, Orfeu\_16, Orion\_17, Orwigg\_17, PG1\_17, Pace1224\_30, Pacifista\_16, Paito\_31, PenguinLover67\_20, Phamished\_17, Phareon\_17, PhatCats2014\_17, PhatLouie\_17, Phelemich\_18, PhenghisKhan\_16, Pherdinand\_17, Phergie\_16, Phipps\_17, Phleuron\_16, PhrankReynolds\_16, PhrodoBaggins\_16, Phunky\_17, Piglet\_0016, PinheadLarry\_17, Pinkman\_16, Pinnie\_32, Pipsqueak\_17, Placalicious\_16, Plmatters\_17, Podrick\_17, Pops\_17, Poster\_16, Potter\_16, Prickles\_17, Prince\_17, ProfessorX\_17, Puhltonio\_17, QueenBeane\_17, QueenPie\_17, Quisquilliae\_17, RawrgerThat\_17, RedMaple\_16, Reprobate\_18, Rich\_18, Ricotta\_16, Riggan\_17, Rimu\_16, Rinkes\_21, Robyn\_16, Roliet\_17, Roscoe\_18, Roy17\_17, SDcharge11\_17, Saguaro\_19, Samaymay\_17, SassyCat97\_16, Schadenfreude\_16, Scoot17C\_17, Scrick\_16, Selr12\_17, Serendipitous\_18, Serendipity\_17, Serpentine\_0017,

Sheila\_17, Shenyu\_18, ShiVal\_17, Sigman\_17, SilverBell\_17, Simielle\_16, Skippy\_17, Slatt\_17, Soile\_17, Solosis\_16, Sophia\_16, Soto\_17, Spartan300\_17, Squid\_17, Squiggle\_17, Stargaze\_31, Stinger\_15, Struggle\_16, Suffolk\_17, Suigeneris\_18, Surely\_17, Swiphy\_17, Swish\_17, TallGrassMM\_17, Telesworld\_16, Thora\_17, ThreeOh3D2\_17, Thunderbird\_16, Timmi\_16, TomBombadil\_17, Tomlarah\_17, Toni\_16, Tooj\_17, True\_16, Trypo\_17, TyrionL\_16, UAch1\_17, Ubuntu\_36, UncleHowie\_17, Usavi\_17, Vaishali24\_16, Valjean\_17, Vaticameos\_17, Veritas\_16, Vincenzo\_18, VioletZ\_17, Virapocalypse\_17, Virgeve\_16, Vista\_17, Vivaldi\_17, Vortex\_17, Waleliano\_17, Wallhey\_16, Waterdiva\_17, Webster2\_36, Weher20\_17, Windsor\_16, Wishmaker\_35, Xavier\_16, Xincheng\_17, Yoshand\_17, YouGoGlencoco\_17, Zaider\_18, Zelda\_17, Zemanar\_18, Zonia\_17,

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

- ElvisPhasley\_17, Jiraiya\_17, KarasumaRum\_20, Lopsy\_16, Mysterious\_19, Nehemiah\_17, Rita130\_18, Schueller\_16, SirJeffery\_18, StinkyVeggy\_20, Thonko\_18,

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

- Aikoy\_49, Angel\_31, Annihilator\_31, Aroostook\_31, Avrafan\_31, AzulaCat\_31, BPs\_31, BQuat\_31, Barkley26\_31, BruceB\_31, CLED96\_31, Camri\_31, CassieYates\_31, Cedasite\_31, Chance64\_31, Cherrybomb426\_31, Coleslaw\_31, Crespo\_31, DMoney\_31, DNAll\_0031, Darionha\_31, ECartman\_31, Frosty24\_31, Gideon\_31, GoldenAsh\_31, Gomashi\_31, Grizzly\_31, Halo\_31, Hope\_31, Hotshotbaby7\_31, JacoRen57\_28, Jane\_31, Jolene\_31, Jonghyun\_31, JorRay\_31, Kareem\_31, Kasen3\_31, Leopard\_49, Liefie\_31, LouisV14\_31, Maliketh\_31, Marmie\_31, Mowgli\_31, OctaviousRex\_31, Olga\_31, Onyinye\_50, Peeb\_31, Periodt\_31, Phish\_31, Phreak\_31, PinkYoshi\_31, Plagueis\_31, Rabbs\_31, Remy19\_31, Renaissance\_31, Schiebel\_31, ShaboiShabazz\_31, Sizemore\_31, Sneeze\_31, Sweets\_31, Taheera\_31, Terror\_31, TinaBug\_31, TomBrady\_31, Weirdo19\_32, Wendigo\_31, ZoMa\_31, Zombie\_31,

### Summary by start number:

Start 7:

- Found in 1 of 449 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 399
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko\_18 (B8),

Start 8:

- Found in 381 of 449 ( 84.9% ) of genes in pham
- Manual Annotations of this start: 334 of 399
- Called 97.1% of time when present
- Phage (with cluster) where this start called: ABU\_17 (B1), AbsoluteMadLad\_16 (B1), Acadian\_18 (B5), Adriana\_17 (B1), Aelin\_16 (B1), Ahwei\_16 (B4), AlanGrant\_18 (B4), AltPhacts\_17 (B1), Altwerkus\_16 (B1), Amochick\_36 (Q), Amymech\_36 (Q), Anderson\_17 (B1), Andre\_17 (B1), AngelCake\_16 (B1), Antihero\_16 (B4), Antonia\_16 (B1), Antsirabe\_31 (G5), Apex\_17 (B4), Apizium\_16 (B1), Ashraf\_16 (B1), Austelle\_18 (B4), Avocado\_30 (G2), Badfish\_17 (B1), Bae\_18 (B5), Banjo\_16 (B1), Basato\_18 (B1), BatteryCK\_16 (B1), Beaglebox\_16 (B1), Bishoperium\_16 (B1), BlackStallion\_17 (B1), BlueHusk\_17 (B1), Bluephacebaby\_16 (B1), BobbyK\_17 (B4), Boehler\_17 (B1), Brilliant\_17 (B1), BrownCNA\_18 (B4), Buckeye\_17 (B1), Burr\_16 (B1), CamL\_17 (B1), Cambiare\_31 (G2), CampRoach\_17 (B1), Cannibal\_17 (B1),

Carthage\_16 (B1), CaspiBoi\_18 (B1), Chaelin\_16 (B1), Chah\_17 (B1), Charles1\_17 (B1), CharlieGBrown\_16 (B1), CheetO\_17 (B1), Cher\_16 (B1), Childish\_16 (B1), Chorkpop\_17 (B1), ChrisnMich\_16 (B4), Chunky\_17 (B1), Chute\_16 (B1), Cobra\_17 (B1), Colbert\_17 (B1), Coletti\_16 (B1), Cooper\_17 (B4), Cornobble\_16 (B1), Cosmolli16\_16 (B1), Craff\_17 (B1), Crownjwl\_17 (B1), DaddyDaniels\_17 (B1), Daegal\_37 (Q), Daffy\_17 (B1), Daka\_17 (B1), Dati\_17 (B1), DeepSoil15\_36 (Q), DelRivs\_16 (B1), Derpp\_16 (B1), Dewey\_35 (Q), Dice\_16 (B1), DigitDog\_19 (B5), Dingo\_17 (B1), Dione\_16 (B1), DirtJuice\_17 (B1), Doddsville\_17 (B1), DoesntMatter\_17 (B1), DonSanchon\_16 (B1), Donny\_18 (B5), DuchessDung\_16 (B1), Duggie\_16 (B1), Durga\_17 (B1), EastView9101\_18 (B5), Ein37\_36 (Q), Emiris\_17 (B1), EmpTee\_17 (B1), Epah\_16 (B4), Eremos\_17 (B1), Etaye\_17 (B1), Eugenia\_17 (B1), Evanesce\_35 (Q), Fanaw\_17 (B4), Fang\_17 (B1), FlagStaff\_30 (G2), FluffyNinja\_17 (B1), Forge\_35 (Q), Fortunato\_17 (B4), Fozzie\_16 (B1), Frankicide\_17 (B1), Frederick\_17 (B4), Freya\_16 (B1), FriarPreacher\_17 (B1), Fringe\_17 (B1), FugateOSU\_16 (B1), Funsized\_21 (B9), Gancho\_35 (Q), Gareth\_16 (B1), GeneCoco\_17 (B1), Giles\_35 (Q), GinPorsche\_16 (B4), Giraffe\_17 (B1), Gophee\_17 (B1), Grand2040\_16 (B1), Gravallia\_35 (Q), Gwennie1\_17 (B1), Gwilliam\_17 (B1), Gyarad\_0017 (B1), HH92\_35 (Q), HSavage\_17 (B1), Hadrien\_36 (Q), Hail\_35 (Q), Haimas\_17 (B1), Haleema\_16 (B1), Hally898\_16 (B4), Hamish\_17 (B1), Hangman\_17 (B4), Hartsy\_17 (B1), Harvey\_17 (B1), Heath\_17 (B4), Held\_17 (B1), HenryJackson\_16 (B1), Hertubise\_17 (B1), Hetaeria\_17 (B1), HighStump\_16 (B1), Hocus\_16 (B1), Horchata\_17 (B1), Hydro\_17 (B4), ImtiyazSitla\_16 (B1), Inchworm\_17 (B1), Indlovu\_17 (B11), Inverness\_17 (B1), Iridessa\_16 (B1), Iridoclysis\_17 (B1), IsaacEli\_17 (B1), JAMaL\_17 (B4), JDog\_16 (B1), JacAttac\_17 (B1), JaguarMi\_18 (B4), JakeO\_16 (B1), JangoPhett\_17 (B1), Jesabah\_17 (B1), Jillium\_16 (B1), Jiminy\_16 (B1), Jolie2\_31 (G4), KLucky39\_17 (B1), Kahve\_16 (B1), Kailash\_17 (B1), Katniss\_17 (B1), Keitherie\_17 (B1), Khan1\_17 (B1), Kikipoo\_17 (B1), Kimbrough\_17 (B1), Kinbote\_36 (Q), KingTut\_16 (B1), KingVeVeVe\_17 (B1), KlimbOn\_17 (B1), Kloppinator\_17 (B1), Knocker\_21 (B9), Kwadwo\_16 (B1), Kwksand96\_16 (B1), Labeouficaum\_16 (B1), Lambano\_16 (B4), LasagnaCat\_17 (B1), Lasso\_17 (B1), LeeLot\_17 (B1), Lego3393\_17 (B1), Legolas\_16 (B1), LeiMonet\_17 (B1), LemonSlice\_17 (B1), Lemuria\_32 (G4), LilHazelNut\_36 (Q), LilMcDreamy\_17 (B12), Lolalove\_17 (B4), Longacauda\_16 (B1), LostAndPhound\_16 (B1), LuckyMarjie\_16 (B1), Luke\_36 (Q), Lulumae\_16 (B1), Lulwa\_17 (B1), Lumine\_16 (B1), Luna22\_35 (Q), MOOREtheMARYer\_32 (G3), MRabcd\_16 (B1), Mag7\_16 (B1), Magic8\_17 (B1), Magpie\_17 (B4), Mana\_16 (B1), Manad\_16 (B1), Maru\_16 (B1), Maskar\_16 (B1), Matalotodo\_17 (B1), Mcshane\_16 (B1), Mecca\_16 (B1), Megamind20\_17 (B1), Megatron\_17 (B1), Melc17\_17 (B1), MelsMeow\_16 (B1), Mercurio\_33 (G4), Mesh1\_17 (B1), Mesmerelda\_17 (B1), MichaelPhcott\_16 (B1), Mikota\_17 (B1), MiniBoss\_17 (B1), MitKao\_17 (B1), Mithril\_17 (B4), Morgushi\_17 (B1), Morty\_17 (B1), Mosaic\_16 (B1), MrPhizzler\_16 (B1), Mudslide\_17 (B4), Mulan\_16 (B1), Murdoc\_17 (B1), Mutante\_16 (B1), Nacho\_0017 (B1), Nanao\_16 (B4), Nangang\_18 (B5), Nathan\_18 (B1), Newman\_17 (B1), Nicole21\_17 (B1), Nigel\_15 (B4), NumberTen\_17 (B1), Nyala\_16 (B1), OBUpride\_36 (Q), OSmaximus\_17 (B1), Olak\_16 (B1), Oline\_16 (B1), Olive\_17 (B1), OliverWalter\_17 (B1), Omniscient\_17 (B1), Oosterbaan\_17 (B1), Orfeu\_16 (B1), Orion\_17 (B1), Orwigg\_17 (B1), PG1\_17 (B1), Pace1224\_30 (G2), Pacifista\_16 (B1), Paito\_31 (G1), PenguinLover67\_20 (B9), Phamished\_17 (B1), Phareon\_17 (B1), PhatCats2014\_17 (B1), PhatLouie\_17 (B1), Phelemich\_18 (B5), PhenghisKhan\_16 (B1), Pherdinand\_17 (B1), Phergie\_16 (B1), Phipps\_17 (B1), Phleuron\_16 (B1), PhrankReynolds\_16 (B1), PhrodoBaggins\_16 (B1), Phunky\_17 (B1), Piglet\_0016 (B1), PinheadLarry\_17 (B1), Pinkman\_16 (B1), Pinnie\_32 (G3), Pipsqueak\_17 (B1), Placalicious\_16 (B1), Plmatters\_17 (B1), Podrick\_17 (B1), Pops\_17 (B1), Poster\_16 (B4), Potter\_16 (B1),



Prickles\_17 (B1), Prince\_17 (B4), ProfessorX\_17 (B1), Puhltonio\_17 (B1), QueenBeane\_17 (B1), QueenPie\_17 (B4), Quisquiliae\_17 (B1), RawrgerThat\_17 (B4), RedMaple\_16 (B1), Reprobate\_18 (B5), Rich\_18 (B5), Ricotta\_16 (B1), Riggan\_17 (B1), Rimu\_16 (B1), Rinkes\_21 (B9), Robyn\_16 (B1), Roliet\_17 (B1), Roscoe\_18 (B1), Roy17\_17 (B1), SDcharge11\_17 (B1), Saguaro\_19 (B7), Samaymay\_17 (B1), SassyCat97\_16 (B1), Schadenfreude\_16 (B1), Scoot17C\_17 (B1), Scrick\_16 (B1), Selr12\_17 (B1), Serendipitous\_18 (B5), Serendipity\_17 (B1), Serpentine\_0017 (B1), Sheila\_17 (B1), Shenyu\_18 (B5), ShiVal\_17 (B1), Sigman\_17 (B1), SilverBell\_17 (B1), Simielle\_16 (B1), Skippy\_17 (B1), Slatt\_17 (B1), Soile\_17 (B1), Solosis\_16 (B1), Sophia\_16 (B1), Soto\_17 (B1), Spartan300\_17 (B1), Squid\_17 (B1), Squiggle\_17 (B1), Stargaze\_31 (G5), Stinger\_15 (B4), Struggle\_16 (B1), Suffolk\_17 (B1), Suigeneris\_18 (B5), Surely\_17 (B1), Swiphy\_17 (B1), Swish\_17 (B1), TallGrassMM\_17 (B1), Telesworld\_16 (B1), Thora\_17 (B1), ThreeOh3D2\_17 (B1), Thunderbird\_16 (B1), Timmi\_16 (B1), TomBombadil\_17 (B1), Tomlarah\_17 (B1), Toni\_16 (B1), Tooj\_17 (B1), True\_16 (B1), Trypo\_17 (B1), TyrionL\_16 (B1), UAch1\_17 (B1), Ubuntu\_36 (Q), UncleHowie\_17 (B1), Usavi\_17 (B1), Vaishali24\_16 (B1), Valjean\_17 (B1), Vaticameos\_17 (B1), Veritas\_16 (B1), Vincenzo\_18 (B4), VioletZ\_17 (B4), Virapocalypse\_17 (B1), Virgeve\_16 (B1), Vista\_17 (B1), Vivaldi\_17 (B1), Vortex\_17 (B1), Waleliano\_17 (B4), Wallhey\_16 (B1), Waterdiva\_17 (B1), Webster2\_36 (Q), Weher20\_17 (B1), Windsor\_16 (B1), Wishmaker\_35 (Q), Xavier\_16 (B1), Xincheng\_17 (B4), Yoshand\_17 (B1), YouGoGlencoco\_17 (B1), Zaider\_18 (B1), Zelda\_17 (B1), Zemanar\_18 (B4), Zonia\_17 (B1),

#### Start 9:

- Found in 66 of 449 ( 14.7% ) of genes in pham
- Manual Annotations of this start: 60 of 399
- Called 97.0% of time when present
- Phage (with cluster) where this start called: Angel\_31 (G1), Annihilator\_31 (G1), Aroostook\_31 (G1), Avrafan\_31 (G1), AzulaCat\_31 (G1), BPs\_31 (G1), BQuat\_31 (G1), Barkley26\_31 (G1), BruceB\_31 (G1), CLED96\_31 (G1), Camri\_31 (G1), CassieYates\_31 (G1), Cedasite\_31 (G1), Chance64\_31 (G1), Cherrybomb426\_31 (G1), Coleslaw\_31 (G1), Crespo\_31 (G1), DMoney\_31 (G1), DNAllI\_0031 (G1), Darionha\_31 (G1), ECartman\_31 (G1), Frosty24\_31 (G1), Gideon\_31 (G1), GoldenAsh\_31 (G1), Gomashi\_31 (G1), Grizzly\_31 (G1), Halo\_31 (G1), Hope\_31 (G1), Hotshotbaby7\_31 (G1), JacoRen57\_28 (AB), Jane\_31 (G1), Jolene\_31 (G1), Jonghyun\_31 (G1), JorRay\_31 (G1), Kareem\_31 (G1), Kasen3\_31 (G1), Liefie\_31 (G1), LouisV14\_31 (G1), Maliketh\_31 (G1), Marmie\_31 (G1), Mowgli\_31 (G1), OctaviousRex\_31 (G1), Olga\_31 (G1), Peeb\_31 (G1), Periodt\_31 (G1), Phish\_31 (G1), Phreak\_31 (G1), PinkYoshi\_31 (G1), Plagueis\_31 (G1), Rabbs\_31 (G1), Remy19\_31 (G1), Renaissance\_31 (G1), Schiebel\_31 (G1), ShaboiShabazz\_31 (G1), Sizemore\_31 (G1), Sneeze\_31 (G1), Sweets\_31 (G1), Taheera\_31 (G1), Terror\_31 (G1), TinaBug\_31 (G1), TomBrady\_31 (G1), Wendigo\_31 (G1), ZoMa\_31 (G1), Zombie\_31 (G1),

#### Start 10:

- Found in 313 of 449 ( 69.7% ) of genes in pham
- Manual Annotations of this start: 1 of 399
- Called 2.9% of time when present
- Phage (with cluster) where this start called: ElvisPhasley\_17 (B1), Jiraiya\_17 (B1), KarasumaRum\_20 (B5), Lopsy\_16 (B1), Mysterious\_19 (B5), Nehemiah\_17 (B5), Rita130\_18 (B5), SirJeffery\_18 (B5), StinkyVeggy\_20 (B5),

#### Start 14:

- Found in 3 of 449 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 3 of 399
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aikoy\_49 (AE), Leopard\_49 (AE), Onyinye\_50 (AE),

Start 39:

- Found in 1 of 449 ( 0.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Weirido19\_32 (AH),

Start 42:

- Found in 312 of 449 ( 69.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 0.3% of time when present
- Phage (with cluster) where this start called: Schueller\_16 (B1),

### **Summary by clusters:**

There are 17 clusters represented in this pham: Q, G5, AB, G3, G2, G1, AH, B4, B5, B7, B12, B1, B11, AE, B8, B9, G4,

Info for manual annotations of cluster AB:

- Start number 9 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster AE:

- Start number 14 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster B1:

- Start number 8 was manually annotated 262 times for cluster B1.
- Start number 10 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster B11:

- Start number 8 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 8 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B4:

- Start number 8 was manually annotated 25 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 8 was manually annotated 9 times for cluster B5.

Info for manual annotations of cluster B7:

- Start number 8 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 7 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 8 was manually annotated 4 times for cluster B9.

Info for manual annotations of cluster G1:

- Start number 8 was manually annotated 1 time for cluster G1.
- Start number 9 was manually annotated 59 times for cluster G1.

Info for manual annotations of cluster G2:

- Start number 8 was manually annotated 3 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 8 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 8 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 8 was manually annotated 1 time for cluster G5.

Info for manual annotations of cluster Q:

- Start number 8 was manually annotated 22 times for cluster Q.

### ***Gene Information:***

Gene: ABU\_17 Start: 13989, Stop: 14603, Start Num: 8

Candidate Starts for ABU\_17:

(Start: 8 @13989 has 334 MA's), (Start: 10 @13998 has 1 MA's), (18, 14031), (42, 14133), (73, 14280), (84, 14361), (87, 14370), (96, 14415), (120, 14595),

Gene: AbsoluteMadLad\_16 Start: 13993, Stop: 14607, Start Num: 8

Candidate Starts for AbsoluteMadLad\_16:

(Start: 8 @13993 has 334 MA's), (Start: 10 @14002 has 1 MA's), (18, 14035), (42, 14137), (73, 14284), (87, 14374), (96, 14419), (116, 14563), (120, 14599),

Gene: Acadian\_18 Start: 15598, Stop: 16197, Start Num: 8

Candidate Starts for Acadian\_18:

(Start: 8 @15598 has 334 MA's), (Start: 10 @15607 has 1 MA's), (15, 15628), (21, 15649), (26, 15667), (28, 15673), (46, 15760), (50, 15778), (53, 15790), (56, 15802), (57, 15805), (81, 15952), (89, 15985), (102, 16066), (116, 16168), (118, 16189),

Gene: Adriana\_17 Start: 13991, Stop: 14605, Start Num: 8

Candidate Starts for Adriana\_17:

(Start: 8 @13991 has 334 MA's), (Start: 10 @14000 has 1 MA's), (18, 14033), (42, 14135), (73, 14282), (84, 14363), (87, 14372), (96, 14417), (120, 14597),

Gene: Aelin\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for Aelin\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Ahwei\_16 Start: 14678, Stop: 15289, Start Num: 8

Candidate Starts for Ahwei\_16:

(Start: 8 @14678 has 334 MA's), (17, 14717), (22, 14732), (32, 14768), (46, 14840), (50, 14858), (56, 14882), (57, 14885), (67, 14936), (87, 15059), (97, 15110), (102, 15146), (103, 15155), (117, 15269),

Gene: Aikoy\_49 Start: 37935, Stop: 38507, Start Num: 14

Candidate Starts for Aikoy\_49:

(Start: 14 @37935 has 3 MA's), (27, 37983), (38, 38040), (49, 38088), (50, 38091), (53, 38103), (56, 38115), (58, 38121), (59, 38133), (73, 38202), (81, 38265), (88, 38295), (90, 38301), (91, 38307),

Gene: AlanGrant\_18 Start: 16515, Stop: 17126, Start Num: 8

Candidate Starts for AlanGrant\_18:

(Start: 8 @16515 has 334 MA's), (21, 16566), (23, 16575), (32, 16605), (42, 16659), (50, 16695), (56, 16719), (67, 16773), (97, 16947), (102, 16983), (103, 16992),

Gene: AltPhacts\_17 Start: 13986, Stop: 14600, Start Num: 8

Candidate Starts for AltPhacts\_17:

(Start: 8 @13986 has 334 MA's), (Start: 10 @13995 has 1 MA's), (18, 14028), (42, 14130), (73, 14277), (84, 14358), (87, 14367), (96, 14412), (116, 14556), (120, 14592),

Gene: Altwerkus\_16 Start: 13686, Stop: 14300, Start Num: 8

Candidate Starts for Altwerkus\_16:

(Start: 8 @13686 has 334 MA's), (Start: 10 @13695 has 1 MA's), (18, 13728), (42, 13830), (73, 13977), (87, 14067), (96, 14112), (116, 14256), (120, 14292),

Gene: Amochick\_36 Start: 30335, Stop: 30955, Start Num: 8

Candidate Starts for Amochick\_36:

(5, 30284), (Start: 8 @30335 has 334 MA's), (20, 30383), (28, 30410), (35, 30437), (37, 30455), (49, 30521), (66, 30611), (71, 30644), (81, 30719), (84, 30737), (91, 30761), (94, 30782), (96, 30791), (101, 30827), (102, 30833), (113, 30911),

Gene: Amymech\_36 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Amymech\_36:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: Anderson\_17 Start: 13982, Stop: 14596, Start Num: 8

Candidate Starts for Anderson\_17:

(Start: 8 @13982 has 334 MA's), (Start: 10 @13991 has 1 MA's), (18, 14024), (42, 14126), (73, 14273), (87, 14363), (96, 14408), (116, 14552), (120, 14588),

Gene: Andre\_17 Start: 13980, Stop: 14594, Start Num: 8

Candidate Starts for Andre\_17:

(Start: 8 @13980 has 334 MA's), (Start: 10 @13989 has 1 MA's), (18, 14022), (42, 14124), (73, 14271), (84, 14352), (87, 14361), (96, 14406), (116, 14550), (120, 14586),

Gene: Angel\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Angel\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: AngelCake\_16 Start: 13994, Stop: 14608, Start Num: 8

Candidate Starts for AngelCake\_16:

(Start: 8 @13994 has 334 MA's), (Start: 10 @14003 has 1 MA's), (18, 14036), (42, 14138), (73, 14285), (87, 14375), (96, 14420), (116, 14564), (120, 14600),

Gene: Annihilator\_31 Start: 27098, Stop: 27715, Start Num: 9

Candidate Starts for Annihilator\_31:

(Start: 9 @27098 has 60 MA's), (21, 27146), (30, 27179), (33, 27188), (37, 27215), (40, 27239), (47, 27272), (49, 27281), (52, 27293), (55, 27302), (71, 27404), (74, 27419), (78, 27461), (92, 27524), (106, 27626),

Gene: Antihero\_16 Start: 14678, Stop: 15289, Start Num: 8

Candidate Starts for Antihero\_16:

(Start: 8 @14678 has 334 MA's), (17, 14717), (22, 14732), (32, 14768), (46, 14840), (50, 14858), (56, 14882), (57, 14885), (67, 14936), (87, 15059), (97, 15110), (102, 15146), (103, 15155), (117, 15269),

Gene: Antonia\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for Antonia\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Antsirabe\_31 Start: 28830, Stop: 29489, Start Num: 8

Candidate Starts for Antsirabe\_31:

(4, 28740), (Start: 8 @28830 has 334 MA's), (21, 28881), (51, 29028), (94, 29304), (102, 29355), (103, 29364),

Gene: Apex\_17 Start: 15923, Stop: 16534, Start Num: 8

Candidate Starts for Apex\_17:

(Start: 8 @15923 has 334 MA's), (17, 15962), (22, 15977), (28, 15998), (32, 16013), (42, 16067), (46, 16085), (50, 16103), (56, 16127), (57, 16130), (87, 16304), (97, 16355), (102, 16391), (116, 16493), (117, 16514),

Gene: Apizium\_16 Start: 13726, Stop: 14340, Start Num: 8

Candidate Starts for Apizium\_16:

(Start: 8 @13726 has 334 MA's), (Start: 10 @13735 has 1 MA's), (18, 13768), (42, 13870), (73, 14017), (84, 14098), (87, 14107), (96, 14152), (120, 14332),

Gene: Aroostook\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Aroostook\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533),

Gene: Ashraf\_16 Start: 13544, Stop: 14158, Start Num: 8

Candidate Starts for Ashraf\_16:

(Start: 8 @13544 has 334 MA's), (Start: 10 @13553 has 1 MA's), (18, 13586), (42, 13688), (73, 13835), (87, 13925), (96, 13970), (116, 14114), (120, 14150),

Gene: Austelle\_18 Start: 16379, Stop: 16990, Start Num: 8

Candidate Starts for Austelle\_18:

(Start: 8 @16379 has 334 MA's), (17, 16418), (22, 16433), (28, 16454), (32, 16469), (42, 16523), (46, 16541), (50, 16559), (56, 16583), (57, 16586), (67, 16637), (87, 16760), (97, 16811), (102, 16847), (103, 16856), (116, 16949), (117, 16970),

Gene: Avocado\_30 Start: 28826, Stop: 29482, Start Num: 8

Candidate Starts for Avocado\_30:

(Start: 8 @28826 has 334 MA's), (Start: 10 @28835 has 1 MA's), (17, 28865), (21, 28877), (30, 28910), (47, 29003), (49, 29012), (57, 29042), (101, 29342), (115, 29444),

Gene: Avrafan\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Avrafan\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: AzulaCat\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for AzulaCat\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: BPs\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for BPs\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: BQuat\_31 Start: 27098, Stop: 27715, Start Num: 9

Candidate Starts for BQuat\_31:

(Start: 9 @27098 has 60 MA's), (21, 27146), (30, 27179), (33, 27188), (37, 27215), (40, 27239), (47, 27272), (49, 27281), (52, 27293), (55, 27302), (71, 27404), (74, 27419), (78, 27461), (92, 27524), (106, 27626),

Gene: Badfish\_17 Start: 14015, Stop: 14629, Start Num: 8

Candidate Starts for Badfish\_17:

(Start: 8 @14015 has 334 MA's), (Start: 10 @14024 has 1 MA's), (18, 14057), (42, 14159), (73, 14306), (84, 14387), (87, 14396), (96, 14441), (116, 14585), (120, 14621),

Gene: Bae\_18 Start: 15744, Stop: 16343, Start Num: 8

Candidate Starts for Bae\_18:

(Start: 8 @15744 has 334 MA's), (Start: 10 @15753 has 1 MA's), (15, 15774), (20, 15792), (22, 15798), (23, 15804), (26, 15813), (34, 15843), (46, 15906), (53, 15936), (56, 15948), (57, 15951), (73, 16035), (81, 16098), (102, 16212), (118, 16335),

Gene: Banjo\_16 Start: 13693, Stop: 14307, Start Num: 8

Candidate Starts for Banjo\_16:

(Start: 8 @13693 has 334 MA's), (Start: 10 @13702 has 1 MA's), (18, 13735), (42, 13837), (73, 13984), (87, 14074), (96, 14119), (116, 14263), (120, 14299),

Gene: Barkley26\_31 Start: 27129, Stop: 27746, Start Num: 9

Candidate Starts for Barkley26\_31:

(Start: 9 @27129 has 60 MA's), (21, 27177), (30, 27210), (33, 27219), (37, 27246), (40, 27270), (47, 27303), (49, 27312), (52, 27324), (55, 27333), (71, 27435), (74, 27450), (78, 27492), (92, 27555), (106, 27657),

Gene: Basato\_18 Start: 14219, Stop: 14833, Start Num: 8

Candidate Starts for Basato\_18:

(Start: 8 @14219 has 334 MA's), (Start: 10 @14228 has 1 MA's), (18, 14261), (42, 14363), (73, 14510), (84, 14591), (87, 14600), (96, 14645), (116, 14789), (120, 14825),

Gene: BatteryCK\_16 Start: 13550, Stop: 14164, Start Num: 8

Candidate Starts for BatteryCK\_16:

(Start: 8 @13550 has 334 MA's), (Start: 10 @13559 has 1 MA's), (18, 13592), (42, 13694), (73, 13841), (87, 13931), (96, 13976), (116, 14120), (120, 14156),

Gene: Beaglebox\_16 Start: 13710, Stop: 14324, Start Num: 8

Candidate Starts for Beaglebox\_16:

(Start: 8 @13710 has 334 MA's), (Start: 10 @13719 has 1 MA's), (18, 13752), (42, 13854), (73, 14001), (87, 14091), (96, 14136), (116, 14280), (120, 14316),

Gene: Bishoperium\_16 Start: 13699, Stop: 14313, Start Num: 8

Candidate Starts for Bishoperium\_16:

(Start: 8 @13699 has 334 MA's), (Start: 10 @13708 has 1 MA's), (18, 13741), (42, 13843), (73, 13990), (87, 14080), (96, 14125), (116, 14269), (120, 14305),

Gene: BlackStallion\_17 Start: 14001, Stop: 14615, Start Num: 8

Candidate Starts for BlackStallion\_17:

(Start: 8 @14001 has 334 MA's), (Start: 10 @14010 has 1 MA's), (18, 14043), (42, 14145), (73, 14292), (87, 14382), (96, 14427), (116, 14571), (120, 14607),

Gene: BlueHusk\_17 Start: 13982, Stop: 14596, Start Num: 8

Candidate Starts for BlueHusk\_17:

(Start: 8 @13982 has 334 MA's), (Start: 10 @13991 has 1 MA's), (18, 14024), (42, 14126), (73, 14273), (87, 14363), (96, 14408), (116, 14552), (120, 14588),

Gene: Bluephacebaby\_16 Start: 13699, Stop: 14313, Start Num: 8

Candidate Starts for Bluephacebaby\_16:

(Start: 8 @13699 has 334 MA's), (Start: 10 @13708 has 1 MA's), (18, 13741), (42, 13843), (73, 13990), (87, 14080), (96, 14125), (116, 14269), (120, 14305),

Gene: BobbyK\_17 Start: 15742, Stop: 16353, Start Num: 8

Candidate Starts for BobbyK\_17:

(Start: 8 @15742 has 334 MA's), (17, 15781), (22, 15796), (28, 15817), (32, 15832), (42, 15886), (46, 15904), (50, 15922), (56, 15946), (57, 15949), (87, 16123), (97, 16174), (117, 16333),

Gene: Boehler\_17 Start: 14009, Stop: 14623, Start Num: 8

Candidate Starts for Boehler\_17:

(Start: 8 @14009 has 334 MA's), (Start: 10 @14018 has 1 MA's), (18, 14051), (42, 14153), (73, 14300), (87, 14390), (96, 14435), (116, 14579), (120, 14615),

Gene: Brilliant\_17 Start: 13703, Stop: 14317, Start Num: 8

Candidate Starts for Brilliant\_17:

(Start: 8 @13703 has 334 MA's), (Start: 10 @13712 has 1 MA's), (18, 13745), (42, 13847), (73, 13994), (87, 14084), (96, 14129), (116, 14273), (120, 14309),

Gene: BrownCNA\_18 Start: 15996, Stop: 16607, Start Num: 8

Candidate Starts for BrownCNA\_18:

(Start: 8 @15996 has 334 MA's), (17, 16035), (22, 16050), (32, 16086), (42, 16140), (46, 16158), (50, 16176), (56, 16200), (67, 16254), (87, 16377), (97, 16428), (102, 16464), (117, 16587),

Gene: BruceB\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for BruceB\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Buckeye\_17 Start: 14017, Stop: 14631, Start Num: 8

Candidate Starts for Buckeye\_17:

(Start: 8 @14017 has 334 MA's), (Start: 10 @14026 has 1 MA's), (18, 14059), (42, 14161), (73, 14308), (84, 14389), (87, 14398), (96, 14443), (116, 14587), (120, 14623),

Gene: Burr\_16 Start: 13699, Stop: 14313, Start Num: 8

Candidate Starts for Burr\_16:

(Start: 8 @13699 has 334 MA's), (Start: 10 @13708 has 1 MA's), (18, 13741), (42, 13843), (73, 13990), (84, 14071), (87, 14080), (96, 14125), (116, 14269), (120, 14305),

Gene: CLED96\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for CLED96\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: CamL\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for CamL\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Cambiare\_31 Start: 29294, Stop: 29950, Start Num: 8

Candidate Starts for Cambiare\_31:

(Start: 8 @29294 has 334 MA's), (Start: 10 @29303 has 1 MA's), (17, 29333), (21, 29345), (30, 29378), (47, 29471), (49, 29480), (57, 29510), (101, 29810), (105, 29840),

Gene: CampRoach\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for CampRoach\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (84, 14360), (87, 14369), (96, 14414), (116, 14558), (120, 14594),

Gene: Camri\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Camri\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Cannibal\_17 Start: 13982, Stop: 14596, Start Num: 8

Candidate Starts for Cannibal\_17:

(Start: 8 @13982 has 334 MA's), (Start: 10 @13991 has 1 MA's), (18, 14024), (42, 14126), (73, 14273), (87, 14363), (96, 14408), (116, 14552), (120, 14588),

Gene: Carthage\_16 Start: 13660, Stop: 14274, Start Num: 8

Candidate Starts for Carthage\_16:

(Start: 8 @13660 has 334 MA's), (Start: 10 @13669 has 1 MA's), (18, 13702), (42, 13804), (73, 13951), (84, 14032), (87, 14041), (96, 14086), (116, 14230), (120, 14266),

Gene: Caspiboi\_18 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Caspiboi\_18:



(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (120, 14310),

Gene: CassieYates\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for CassieYates\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Cedasite\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Cedasite\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Chaelin\_16 Start: 13664, Stop: 14278, Start Num: 8

Candidate Starts for Chaelin\_16:

(Start: 8 @13664 has 334 MA's), (Start: 10 @13673 has 1 MA's), (18, 13706), (42, 13808), (73, 13955), (87, 14045), (96, 14090), (116, 14234), (120, 14270),

Gene: Chah\_17 Start: 14016, Stop: 14630, Start Num: 8

Candidate Starts for Chah\_17:

(Start: 8 @14016 has 334 MA's), (Start: 10 @14025 has 1 MA's), (18, 14058), (42, 14160), (73, 14307), (87, 14397), (96, 14442), (116, 14586), (120, 14622),

Gene: Chance64\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Chance64\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533),

Gene: Charles1\_17 Start: 13979, Stop: 14593, Start Num: 8

Candidate Starts for Charles1\_17:

(Start: 8 @13979 has 334 MA's), (Start: 10 @13988 has 1 MA's), (18, 14021), (42, 14123), (73, 14270), (84, 14351), (87, 14360), (96, 14405), (116, 14549), (120, 14585),

Gene: CharlieGBrown\_16 Start: 13568, Stop: 14182, Start Num: 8

Candidate Starts for CharlieGBrown\_16:

(Start: 8 @13568 has 334 MA's), (Start: 10 @13577 has 1 MA's), (18, 13610), (42, 13712), (73, 13859), (87, 13949), (96, 13994), (116, 14138), (120, 14174),

Gene: CheetO\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for CheetO\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Cher\_16 Start: 13722, Stop: 14336, Start Num: 8

Candidate Starts for Cher\_16:

(Start: 8 @13722 has 334 MA's), (Start: 10 @13731 has 1 MA's), (18, 13764), (42, 13866), (73, 14013), (87, 14103), (96, 14148), (116, 14292), (120, 14328),

Gene: Cherrybomb426\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Cherrybomb426\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (78, 27470), (92, 27533), (106, 27635),

Gene: Childish\_16 Start: 13710, Stop: 14324, Start Num: 8

Candidate Starts for Childish\_16:

(Start: 8 @13710 has 334 MA's), (Start: 10 @13719 has 1 MA's), (18, 13752), (42, 13854), (73, 14001), (87, 14091), (96, 14136), (116, 14280), (120, 14316),

Gene: Chorkpop\_17 Start: 13722, Stop: 14336, Start Num: 8

Candidate Starts for Chorkpop\_17:

(Start: 8 @13722 has 334 MA's), (Start: 10 @13731 has 1 MA's), (18, 13764), (42, 13866), (73, 14013), (87, 14103), (96, 14148), (116, 14292), (120, 14328),

Gene: ChrisnMich\_16 Start: 14678, Stop: 15289, Start Num: 8

Candidate Starts for ChrisnMich\_16:

(Start: 8 @14678 has 334 MA's), (17, 14717), (22, 14732), (32, 14768), (46, 14840), (50, 14858), (56, 14882), (57, 14885), (67, 14936), (87, 15059), (97, 15110), (102, 15146), (103, 15155), (117, 15269),

Gene: Chunky\_17 Start: 14009, Stop: 14623, Start Num: 8

Candidate Starts for Chunky\_17:

(Start: 8 @14009 has 334 MA's), (Start: 10 @14018 has 1 MA's), (18, 14051), (42, 14153), (73, 14300), (84, 14381), (87, 14390), (96, 14435), (116, 14579), (120, 14615),

Gene: Chute\_16 Start: 14012, Stop: 14626, Start Num: 8

Candidate Starts for Chute\_16:

(Start: 8 @14012 has 334 MA's), (Start: 10 @14021 has 1 MA's), (18, 14054), (42, 14156), (73, 14303), (87, 14393), (96, 14438), (116, 14582), (120, 14618),

Gene: Cobra\_17 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for Cobra\_17:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: Colbert\_17 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for Colbert\_17:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: Coleslaw\_31 Start: 27098, Stop: 27715, Start Num: 9

Candidate Starts for Coleslaw\_31:

(Start: 9 @27098 has 60 MA's), (21, 27146), (30, 27179), (33, 27188), (37, 27215), (40, 27239), (47, 27272), (49, 27281), (52, 27293), (55, 27302), (71, 27404), (74, 27419), (78, 27461), (92, 27524), (106, 27626),

Gene: Coletti\_16 Start: 14012, Stop: 14626, Start Num: 8

Candidate Starts for Coletti\_16:

(Start: 8 @14012 has 334 MA's), (Start: 10 @14021 has 1 MA's), (18, 14054), (42, 14156), (73, 14303), (87, 14393), (96, 14438), (116, 14582), (120, 14618),

Gene: Cooper\_17 Start: 14789, Stop: 15397, Start Num: 8

Candidate Starts for Cooper\_17:

(Start: 8 @14789 has 334 MA's), (17, 14828), (22, 14843), (28, 14864), (32, 14879), (37, 14909), (42, 14933), (46, 14951), (50, 14969), (51, 14975), (56, 14993), (57, 14996), (67, 15047), (75, 15086), (87,

15170), (89, 15176), (102, 15257), (103, 15266), (105, 15281), (106, 15290), (109, 15311), (119, 15383),

Gene: Cornobble\_16 Start: 13557, Stop: 14171, Start Num: 8

Candidate Starts for Cornobble\_16:

(Start: 8 @13557 has 334 MA's), (Start: 10 @13566 has 1 MA's), (18, 13599), (42, 13701), (73, 13848), (87, 13938), (96, 13983), (116, 14127), (120, 14163),

Gene: Cosmolli16\_16 Start: 13714, Stop: 14328, Start Num: 8

Candidate Starts for Cosmolli16\_16:

(Start: 8 @13714 has 334 MA's), (Start: 10 @13723 has 1 MA's), (18, 13756), (42, 13858), (73, 14005), (87, 14095), (96, 14140), (116, 14284), (120, 14320),

Gene: Craff\_17 Start: 14003, Stop: 14617, Start Num: 8

Candidate Starts for Craff\_17:

(Start: 8 @14003 has 334 MA's), (Start: 10 @14012 has 1 MA's), (18, 14045), (42, 14147), (73, 14294), (87, 14384), (96, 14429), (116, 14573), (120, 14609),

Gene: Crespo\_31 Start: 27108, Stop: 27725, Start Num: 9

Candidate Starts for Crespo\_31:

(Start: 9 @27108 has 60 MA's), (21, 27156), (30, 27189), (33, 27198), (37, 27225), (40, 27249), (47, 27282), (49, 27291), (52, 27303), (55, 27312), (71, 27414), (74, 27429), (78, 27471), (92, 27534), (106, 27636),

Gene: Crownjwl\_17 Start: 13770, Stop: 14384, Start Num: 8

Candidate Starts for Crownjwl\_17:

(Start: 8 @13770 has 334 MA's), (Start: 10 @13779 has 1 MA's), (18, 13812), (42, 13914), (73, 14061), (84, 14142), (87, 14151), (96, 14196), (116, 14340), (120, 14376),

Gene: DMoney\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for DMoney\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: DNAIII\_0031 Start: 26858, Stop: 27475, Start Num: 9

Candidate Starts for DNAIII\_0031:

(Start: 9 @26858 has 60 MA's), (21, 26906), (33, 26948), (37, 26975), (40, 26999), (47, 27032), (49, 27041), (52, 27053), (55, 27062), (71, 27164), (74, 27179), (78, 27221), (92, 27284), (106, 27386),

Gene: DaddyDaniels\_17 Start: 13706, Stop: 14320, Start Num: 8

Candidate Starts for DaddyDaniels\_17:

(Start: 8 @13706 has 334 MA's), (Start: 10 @13715 has 1 MA's), (18, 13748), (42, 13850), (73, 13997), (84, 14078), (87, 14087), (96, 14132), (116, 14276), (120, 14312),

Gene: Daegal\_37 Start: 30623, Stop: 31243, Start Num: 8

Candidate Starts for Daegal\_37:

(5, 30572), (Start: 8 @30623 has 334 MA's), (20, 30671), (28, 30698), (35, 30725), (37, 30743), (49, 30809), (66, 30899), (71, 30932), (81, 31007), (84, 31025), (91, 31049), (94, 31070), (96, 31079), (101, 31115), (102, 31121), (113, 31199),

Gene: Daffy\_17 Start: 13722, Stop: 14336, Start Num: 8

Candidate Starts for Daffy\_17:

(Start: 8 @13722 has 334 MA's), (Start: 10 @13731 has 1 MA's), (18, 13764), (42, 13866), (73, 14013), (87, 14103), (96, 14148), (116, 14292), (120, 14328),

Gene: Daka\_17 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for Daka\_17:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: Darionha\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Darionha\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Dati\_17 Start: 13710, Stop: 14324, Start Num: 8

Candidate Starts for Dati\_17:

(Start: 8 @13710 has 334 MA's), (Start: 10 @13719 has 1 MA's), (18, 13752), (42, 13854), (73, 14001), (84, 14082), (87, 14091), (96, 14136), (116, 14280), (120, 14316),

Gene: DeepSoil15\_36 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for DeepSoil15\_36:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: DelRivs\_16 Start: 13709, Stop: 14323, Start Num: 8

Candidate Starts for DelRivs\_16:

(Start: 8 @13709 has 334 MA's), (Start: 10 @13718 has 1 MA's), (18, 13751), (42, 13853), (73, 14000), (87, 14090), (96, 14135), (116, 14279), (120, 14315),

Gene: Derpp\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for Derpp\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Dewey\_35 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Dewey\_35:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: Dice\_16 Start: 13697, Stop: 14311, Start Num: 8

Candidate Starts for Dice\_16:

(Start: 8 @13697 has 334 MA's), (Start: 10 @13706 has 1 MA's), (18, 13739), (42, 13841), (73, 13988), (84, 14069), (87, 14078), (96, 14123), (120, 14303),

Gene: DigitDog\_19 Start: 15565, Stop: 16164, Start Num: 8

Candidate Starts for DigitDog\_19:

(Start: 8 @15565 has 334 MA's), (Start: 10 @15574 has 1 MA's), (15, 15595), (26, 15634), (50, 15745), (53, 15757), (56, 15769), (57, 15772), (67, 15823), (80, 15916), (102, 16033), (118, 16156),

Gene: Dingo\_17 Start: 13982, Stop: 14596, Start Num: 8

Candidate Starts for Dingo\_17:

(Start: 8 @13982 has 334 MA's), (Start: 10 @13991 has 1 MA's), (18, 14024), (42, 14126), (73, 14273), (84, 14354), (87, 14363), (96, 14408), (116, 14552), (120, 14588),

Gene: Dione\_16 Start: 13698, Stop: 14312, Start Num: 8

Candidate Starts for Dione\_16:

(Start: 8 @13698 has 334 MA's), (Start: 10 @13707 has 1 MA's), (18, 13740), (42, 13842), (73, 13989), (84, 14070), (87, 14079), (96, 14124), (116, 14268), (120, 14304),

Gene: DirtJuice\_17 Start: 13985, Stop: 14599, Start Num: 8

Candidate Starts for DirtJuice\_17:

(Start: 8 @13985 has 334 MA's), (Start: 10 @13994 has 1 MA's), (18, 14027), (42, 14129), (73, 14276), (84, 14357), (87, 14366), (96, 14411), (116, 14555), (120, 14591),

Gene: Doddsville\_17 Start: 13710, Stop: 14324, Start Num: 8

Candidate Starts for Doddsville\_17:

(Start: 8 @13710 has 334 MA's), (Start: 10 @13719 has 1 MA's), (18, 13752), (42, 13854), (73, 14001), (84, 14082), (87, 14091), (96, 14136), (116, 14280), (120, 14316),

Gene: DoesntMatter\_17 Start: 13979, Stop: 14593, Start Num: 8

Candidate Starts for DoesntMatter\_17:

(Start: 8 @13979 has 334 MA's), (Start: 10 @13988 has 1 MA's), (18, 14021), (42, 14123), (73, 14270), (84, 14351), (87, 14360), (96, 14405), (116, 14549), (120, 14585),

Gene: DonSanchon\_16 Start: 13698, Stop: 14312, Start Num: 8

Candidate Starts for DonSanchon\_16:

(Start: 8 @13698 has 334 MA's), (Start: 10 @13707 has 1 MA's), (18, 13740), (42, 13842), (73, 13989), (87, 14079), (96, 14124), (116, 14268), (120, 14304),

Gene: Donny\_18 Start: 15600, Stop: 16199, Start Num: 8

Candidate Starts for Donny\_18:

(Start: 8 @15600 has 334 MA's), (Start: 10 @15609 has 1 MA's), (15, 15630), (21, 15651), (26, 15669), (28, 15675), (46, 15762), (50, 15780), (53, 15792), (56, 15804), (57, 15807), (82, 15957), (102, 16068), (116, 16170), (118, 16191),

Gene: DuchessDung\_16 Start: 13550, Stop: 14164, Start Num: 8

Candidate Starts for DuchessDung\_16:

(Start: 8 @13550 has 334 MA's), (Start: 10 @13559 has 1 MA's), (18, 13592), (42, 13694), (73, 13841), (84, 13922), (87, 13931), (96, 13976), (120, 14156),

Gene: Duggie\_16 Start: 13712, Stop: 14326, Start Num: 8

Candidate Starts for Duggie\_16:

(Start: 8 @13712 has 334 MA's), (Start: 10 @13721 has 1 MA's), (18, 13754), (42, 13856), (73, 14003), (84, 14084), (87, 14093), (96, 14138), (116, 14282), (120, 14318),

Gene: Durga\_17 Start: 14011, Stop: 14625, Start Num: 8

Candidate Starts for Durga\_17:

(Start: 8 @14011 has 334 MA's), (Start: 10 @14020 has 1 MA's), (18, 14053), (42, 14155), (73, 14302), (87, 14392), (96, 14437), (116, 14581), (120, 14617),

Gene: ECartman\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for ECartman\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533),

Gene: EastView9101\_18 Start: 15609, Stop: 16208, Start Num: 8

Candidate Starts for EastView9101\_18:

(Start: 8 @15609 has 334 MA's), (Start: 10 @15618 has 1 MA's), (15, 15639), (21, 15660), (26, 15678), (31, 15696), (53, 15801), (56, 15813), (57, 15816), (67, 15867), (82, 15966), (93, 16014), (102, 16077), (112, 16152), (118, 16200),

Gene: Ein37\_36 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Ein37\_36:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: ElvisPhasley\_17 Start: 14019, Stop: 14624, Start Num: 10

Candidate Starts for ElvisPhasley\_17:

(Start: 8 @14010 has 334 MA's), (Start: 10 @14019 has 1 MA's), (18, 14052), (42, 14154), (73, 14301), (87, 14391), (96, 14436), (116, 14580), (120, 14616),

Gene: Emiris\_17 Start: 13992, Stop: 14606, Start Num: 8

Candidate Starts for Emiris\_17:

(Start: 8 @13992 has 334 MA's), (Start: 10 @14001 has 1 MA's), (18, 14034), (42, 14136), (73, 14283), (87, 14373), (96, 14418), (116, 14562), (120, 14598),

Gene: EmpTee\_17 Start: 13998, Stop: 14612, Start Num: 8

Candidate Starts for EmpTee\_17:

(Start: 8 @13998 has 334 MA's), (Start: 10 @14007 has 1 MA's), (18, 14040), (42, 14142), (73, 14289), (84, 14370), (87, 14379), (96, 14424), (116, 14568), (120, 14604),

Gene: Epah\_16 Start: 14678, Stop: 15289, Start Num: 8

Candidate Starts for Epah\_16:

(Start: 8 @14678 has 334 MA's), (17, 14717), (22, 14732), (32, 14768), (46, 14840), (50, 14858), (56, 14882), (57, 14885), (67, 14936), (87, 15059), (97, 15110), (102, 15146), (103, 15155), (117, 15269),

Gene: Eremos\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Eremos\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Etaye\_17 Start: 13982, Stop: 14596, Start Num: 8

Candidate Starts for Etaye\_17:

(Start: 8 @13982 has 334 MA's), (Start: 10 @13991 has 1 MA's), (18, 14024), (42, 14126), (73, 14273), (87, 14363), (96, 14408), (120, 14588),

Gene: Eugenia\_17 Start: 14010, Stop: 14624, Start Num: 8

Candidate Starts for Eugenia\_17:

(Start: 8 @14010 has 334 MA's), (Start: 10 @14019 has 1 MA's), (18, 14052), (42, 14154), (73, 14301), (87, 14391), (96, 14436), (116, 14580), (120, 14616),

Gene: Evanesce\_35 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Evanesce\_35:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: Fanaw\_17 Start: 15772, Stop: 16383, Start Num: 8

Candidate Starts for Fanaw\_17:

(Start: 8 @15772 has 334 MA's), (17, 15811), (22, 15826), (32, 15862), (42, 15916), (46, 15934), (50, 15952), (56, 15976), (57, 15979), (67, 16030), (87, 16153), (92, 16171), (97, 16204), (102, 16240), (117, 16363),

Gene: Fang\_17 Start: 14013, Stop: 14627, Start Num: 8

Candidate Starts for Fang\_17:

(Start: 8 @14013 has 334 MA's), (Start: 10 @14022 has 1 MA's), (18, 14055), (42, 14157), (73, 14304), (84, 14385), (87, 14394), (96, 14439), (116, 14583), (120, 14619),

Gene: FlagStaff\_30 Start: 28613, Stop: 29269, Start Num: 8

Candidate Starts for FlagStaff\_30:

(6, 28592), (Start: 8 @28613 has 334 MA's), (Start: 10 @28622 has 1 MA's), (21, 28664), (30, 28697), (37, 28733), (43, 28769), (49, 28799), (57, 28829), (94, 29084), (101, 29129), (102, 29135),

Gene: FluffyNinja\_17 Start: 14001, Stop: 14615, Start Num: 8

Candidate Starts for FluffyNinja\_17:

(Start: 8 @14001 has 334 MA's), (Start: 10 @14010 has 1 MA's), (18, 14043), (42, 14145), (73, 14292), (87, 14382), (96, 14427), (116, 14571), (120, 14607),

Gene: Forge\_35 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Forge\_35:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: Fortunato\_17 Start: 15736, Stop: 16347, Start Num: 8

Candidate Starts for Fortunato\_17:

(Start: 8 @15736 has 334 MA's), (17, 15775), (22, 15790), (28, 15811), (32, 15826), (42, 15880), (46, 15898), (50, 15916), (56, 15940), (57, 15943), (87, 16117), (97, 16168), (117, 16327),

Gene: Fozzie\_16 Start: 14007, Stop: 14621, Start Num: 8

Candidate Starts for Fozzie\_16:

(Start: 8 @14007 has 334 MA's), (Start: 10 @14016 has 1 MA's), (18, 14049), (42, 14151), (73, 14298), (84, 14379), (87, 14388), (96, 14433), (116, 14577), (120, 14613),

Gene: Frankicide\_17 Start: 13999, Stop: 14613, Start Num: 8

Candidate Starts for Frankicide\_17:

(Start: 8 @13999 has 334 MA's), (Start: 10 @14008 has 1 MA's), (18, 14041), (42, 14143), (73, 14290), (87, 14380), (96, 14425), (116, 14569), (120, 14605),

Gene: Frederick\_17 Start: 15745, Stop: 16356, Start Num: 8

Candidate Starts for Frederick\_17:

(Start: 8 @15745 has 334 MA's), (17, 15784), (22, 15799), (28, 15820), (32, 15835), (42, 15889), (46, 15907), (50, 15925), (56, 15949), (57, 15952), (87, 16126), (97, 16177), (117, 16336),

Gene: Freya\_16 Start: 13693, Stop: 14307, Start Num: 8

Candidate Starts for Freya\_16:

(Start: 8 @13693 has 334 MA's), (Start: 10 @13702 has 1 MA's), (18, 13735), (42, 13837), (73, 13984), (87, 14074), (96, 14119), (116, 14263), (120, 14299),

Gene: FriarPreacher\_17 Start: 14018, Stop: 14632, Start Num: 8

Candidate Starts for FriarPreacher\_17:

(Start: 8 @14018 has 334 MA's), (Start: 10 @14027 has 1 MA's), (18, 14060), (42, 14162), (73, 14309), (87, 14399), (96, 14444), (116, 14588), (120, 14624),

Gene: Fringe\_17 Start: 13980, Stop: 14594, Start Num: 8

Candidate Starts for Fringe\_17:

(Start: 8 @13980 has 334 MA's), (Start: 10 @13989 has 1 MA's), (18, 14022), (42, 14124), (73, 14271), (84, 14352), (87, 14361), (96, 14406), (116, 14550), (120, 14586),

Gene: Frosty24\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Frosty24\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: FugateOSU\_16 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for FugateOSU\_16:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Funsized\_21 Start: 17730, Stop: 18329, Start Num: 8

Candidate Starts for Funsized\_21:

(Start: 8 @17730 has 334 MA's), (15, 17760), (24, 17793), (26, 17799), (42, 17874), (51, 17916), (53, 17922), (56, 17934), (64, 17970), (100, 18189), (102, 18198), (111, 18264), (114, 18279), (116, 18300),

Gene: Gancho\_35 Start: 30052, Stop: 30672, Start Num: 8

Candidate Starts for Gancho\_35:

(5, 30001), (Start: 8 @30052 has 334 MA's), (20, 30100), (35, 30154), (37, 30172), (49, 30238), (66, 30328), (71, 30361), (81, 30436), (84, 30454), (91, 30478), (94, 30499), (96, 30508), (101, 30544), (102, 30550), (113, 30628),

Gene: Gareth\_16 Start: 13701, Stop: 14315, Start Num: 8

Candidate Starts for Gareth\_16:

(Start: 8 @13701 has 334 MA's), (Start: 10 @13710 has 1 MA's), (18, 13743), (42, 13845), (73, 13992), (87, 14082), (96, 14127), (116, 14271), (120, 14307),

Gene: GeneCoco\_17 Start: 14003, Stop: 14617, Start Num: 8

Candidate Starts for GeneCoco\_17:

(Start: 8 @14003 has 334 MA's), (Start: 10 @14012 has 1 MA's), (18, 14045), (42, 14147), (73, 14294), (84, 14375), (87, 14384), (96, 14429), (120, 14609),

Gene: Gideon\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Gideon\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Giles\_35 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Giles\_35:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821),



(102, 30827), (113, 30905),

Gene: GinPorsche\_16 Start: 14678, Stop: 15289, Start Num: 8

Candidate Starts for GinPorsche\_16:

(Start: 8 @14678 has 334 MA's), (17, 14717), (22, 14732), (32, 14768), (46, 14840), (50, 14858), (56, 14882), (57, 14885), (67, 14936), (87, 15059), (97, 15110), (102, 15146), (103, 15155), (117, 15269),

Gene: Giraffe\_17 Start: 13705, Stop: 14319, Start Num: 8

Candidate Starts for Giraffe\_17:

(Start: 8 @13705 has 334 MA's), (Start: 10 @13714 has 1 MA's), (18, 13747), (42, 13849), (73, 13996), (87, 14086), (96, 14131), (116, 14275), (120, 14311),

Gene: GoldenAsh\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for GoldenAsh\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Gomashi\_31 Start: 27108, Stop: 27725, Start Num: 9

Candidate Starts for Gomashi\_31:

(Start: 9 @27108 has 60 MA's), (21, 27156), (30, 27189), (33, 27198), (37, 27225), (40, 27249), (47, 27282), (49, 27291), (52, 27303), (55, 27312), (71, 27414), (74, 27429), (78, 27471), (92, 27534), (106, 27636),

Gene: Gophee\_17 Start: 13982, Stop: 14596, Start Num: 8

Candidate Starts for Gophee\_17:

(Start: 8 @13982 has 334 MA's), (Start: 10 @13991 has 1 MA's), (18, 14024), (42, 14126), (73, 14273), (84, 14354), (87, 14363), (96, 14408), (116, 14552), (120, 14588),

Gene: Grand2040\_16 Start: 13720, Stop: 14334, Start Num: 8

Candidate Starts for Grand2040\_16:

(Start: 8 @13720 has 334 MA's), (Start: 10 @13729 has 1 MA's), (18, 13762), (42, 13864), (73, 14011), (87, 14101), (96, 14146), (116, 14290), (120, 14326),

Gene: Gravaillia\_35 Start: 30058, Stop: 30678, Start Num: 8

Candidate Starts for Gravaillia\_35:

(5, 30007), (Start: 8 @30058 has 334 MA's), (20, 30106), (35, 30160), (37, 30178), (44, 30220), (57, 30274), (66, 30334), (71, 30367), (81, 30442), (84, 30460), (91, 30484), (101, 30550), (102, 30556), (113, 30634),

Gene: Grizzly\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Grizzly\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (40, 27248), (47, 27281), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (80, 27485), (92, 27533), (106, 27635),

Gene: Gwennie1\_17 Start: 14021, Stop: 14635, Start Num: 8

Candidate Starts for Gwennie1\_17:

(Start: 8 @14021 has 334 MA's), (Start: 10 @14030 has 1 MA's), (18, 14063), (42, 14165), (73, 14312), (87, 14402), (96, 14447), (116, 14591), (120, 14627),

Gene: Gwilliam\_17 Start: 13994, Stop: 14608, Start Num: 8

Candidate Starts for Gwilliam\_17:

(Start: 8 @13994 has 334 MA's), (Start: 10 @14003 has 1 MA's), (18, 14036), (42, 14138), (73, 14285), (87, 14375), (96, 14420), (116, 14564), (120, 14600),

Gene: Gyarad\_0017 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Gyarad\_0017:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: HH92\_35 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for HH92\_35:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: HSavage\_17 Start: 14005, Stop: 14619, Start Num: 8

Candidate Starts for HSavage\_17:

(Start: 8 @14005 has 334 MA's), (Start: 10 @14014 has 1 MA's), (18, 14047), (42, 14149), (73, 14296), (87, 14386), (96, 14431), (116, 14575), (120, 14611),

Gene: Hadrien\_36 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Hadrien\_36:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: Hail\_35 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Hail\_35:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: Haimas\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Haimas\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Haleema\_16 Start: 13722, Stop: 14336, Start Num: 8

Candidate Starts for Haleema\_16:

(Start: 8 @13722 has 334 MA's), (Start: 10 @13731 has 1 MA's), (18, 13764), (42, 13866), (73, 14013), (84, 14094), (87, 14103), (96, 14148), (116, 14292), (120, 14328),

Gene: Hally898\_16 Start: 14678, Stop: 15289, Start Num: 8

Candidate Starts for Hally898\_16:

(Start: 8 @14678 has 334 MA's), (17, 14717), (22, 14732), (32, 14768), (46, 14840), (50, 14858), (56, 14882), (57, 14885), (67, 14936), (87, 15059), (97, 15110), (102, 15146), (103, 15155), (117, 15269),

Gene: Halo\_31 Start: 27102, Stop: 27719, Start Num: 9

Candidate Starts for Halo\_31:

(Start: 9 @27102 has 60 MA's), (21, 27150), (30, 27183), (33, 27192), (37, 27219), (40, 27243), (47, 27276), (49, 27285), (52, 27297), (55, 27306), (71, 27408), (74, 27423), (78, 27465), (92, 27528), (106, 27630),

Gene: Hamish\_17 Start: 13991, Stop: 14605, Start Num: 8

Candidate Starts for Hamish\_17:

(Start: 8 @13991 has 334 MA's), (Start: 10 @14000 has 1 MA's), (18, 14033), (42, 14135), (73, 14282), (84, 14363), (87, 14372), (96, 14417), (116, 14561), (120, 14597),

Gene: Hangman\_17 Start: 15745, Stop: 16356, Start Num: 8

Candidate Starts for Hangman\_17:

(Start: 8 @15745 has 334 MA's), (17, 15784), (22, 15799), (32, 15835), (42, 15889), (46, 15907), (50, 15925), (56, 15949), (67, 16003), (83, 16108), (87, 16126), (88, 16129), (97, 16177), (102, 16213), (117, 16336),

Gene: Hartsy\_17 Start: 13994, Stop: 14608, Start Num: 8

Candidate Starts for Hartsy\_17:

(Start: 8 @13994 has 334 MA's), (Start: 10 @14003 has 1 MA's), (18, 14036), (42, 14138), (73, 14285), (87, 14375), (96, 14420), (116, 14564), (120, 14600),

Gene: Harvey\_17 Start: 14019, Stop: 14633, Start Num: 8

Candidate Starts for Harvey\_17:

(Start: 8 @14019 has 334 MA's), (Start: 10 @14028 has 1 MA's), (18, 14061), (42, 14163), (73, 14310), (87, 14400), (96, 14445), (116, 14589), (120, 14625),

Gene: Heath\_17 Start: 15742, Stop: 16353, Start Num: 8

Candidate Starts for Heath\_17:

(Start: 8 @15742 has 334 MA's), (17, 15781), (22, 15796), (37, 15862), (42, 15886), (46, 15904), (50, 15922), (56, 15946), (67, 16000), (87, 16123), (97, 16174), (102, 16210), (117, 16333),

Gene: Held\_17 Start: 13705, Stop: 14319, Start Num: 8

Candidate Starts for Held\_17:

(Start: 8 @13705 has 334 MA's), (Start: 10 @13714 has 1 MA's), (18, 13747), (42, 13849), (73, 13996), (87, 14086), (96, 14131), (116, 14275), (120, 14311),

Gene: HenryJackson\_16 Start: 13719, Stop: 14333, Start Num: 8

Candidate Starts for HenryJackson\_16:

(Start: 8 @13719 has 334 MA's), (Start: 10 @13728 has 1 MA's), (18, 13761), (42, 13863), (73, 14010), (84, 14091), (87, 14100), (96, 14145), (116, 14289), (120, 14325),

Gene: Hertubise\_17 Start: 14012, Stop: 14626, Start Num: 8

Candidate Starts for Hertubise\_17:

(Start: 8 @14012 has 334 MA's), (Start: 10 @14021 has 1 MA's), (18, 14054), (42, 14156), (73, 14303), (87, 14393), (96, 14438), (116, 14582), (120, 14618),

Gene: Hetaeria\_17 Start: 14015, Stop: 14629, Start Num: 8

Candidate Starts for Hetaeria\_17:

(Start: 8 @14015 has 334 MA's), (Start: 10 @14024 has 1 MA's), (18, 14057), (42, 14159), (73, 14306), (87, 14396), (96, 14441), (116, 14585), (120, 14621),

Gene: HighStump\_16 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for HighStump\_16:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Hocus\_16 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Hocus\_16:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Hope\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Hope\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Horchata\_17 Start: 13984, Stop: 14598, Start Num: 8

Candidate Starts for Horchata\_17:

(Start: 8 @13984 has 334 MA's), (Start: 10 @13993 has 1 MA's), (18, 14026), (42, 14128), (73, 14275), (84, 14356), (87, 14365), (96, 14410), (116, 14554), (120, 14590),

Gene: Hotshotbaby7\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Hotshotbaby7\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533),

Gene: Hydro\_17 Start: 15742, Stop: 16353, Start Num: 8

Candidate Starts for Hydro\_17:

(Start: 8 @15742 has 334 MA's), (17, 15781), (22, 15796), (32, 15832), (42, 15886), (46, 15904), (50, 15922), (56, 15946), (67, 16000), (83, 16105), (87, 16123), (88, 16126), (97, 16174), (102, 16210), (117, 16333),

Gene: ImtiyazSitla\_16 Start: 13544, Stop: 14158, Start Num: 8

Candidate Starts for ImtiyazSitla\_16:

(Start: 8 @13544 has 334 MA's), (Start: 10 @13553 has 1 MA's), (18, 13586), (42, 13688), (73, 13835), (87, 13925), (96, 13970), (116, 14114), (120, 14150),

Gene: Inchworm\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for Inchworm\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (84, 14360), (87, 14369), (96, 14414), (116, 14558), (120, 14594),

Gene: Indlovu\_17 Start: 15595, Stop: 16194, Start Num: 8

Candidate Starts for Indlovu\_17:

(Start: 8 @15595 has 334 MA's), (Start: 10 @15604 has 1 MA's), (20, 15643), (31, 15682), (46, 15757), (54, 15790), (78, 15931), (84, 15967), (87, 15976), (108, 16111), (110, 16126),

Gene: Inverness\_17 Start: 14005, Stop: 14619, Start Num: 8

Candidate Starts for Inverness\_17:

(Start: 8 @14005 has 334 MA's), (Start: 10 @14014 has 1 MA's), (18, 14047), (42, 14149), (73, 14296), (87, 14386), (96, 14431), (116, 14575), (120, 14611),

Gene: Iridessa\_16 Start: 13673, Stop: 14287, Start Num: 8

Candidate Starts for Iridessa\_16:

(Start: 8 @13673 has 334 MA's), (Start: 10 @13682 has 1 MA's), (18, 13715), (42, 13817), (73, 13964), (87, 14054), (96, 14099), (116, 14243), (120, 14279),

Gene: Iridoclysis\_17 Start: 13977, Stop: 14591, Start Num: 8

Candidate Starts for Iridoclysis\_17:

(Start: 8 @13977 has 334 MA's), (Start: 10 @13986 has 1 MA's), (18, 14019), (42, 14121), (73, 14268), (84, 14349), (87, 14358), (96, 14403), (116, 14547), (120, 14583),

Gene: IsaacEli\_17 Start: 14009, Stop: 14623, Start Num: 8

Candidate Starts for IsaacEli\_17:

(Start: 8 @14009 has 334 MA's), (Start: 10 @14018 has 1 MA's), (18, 14051), (42, 14153), (73, 14300), (87, 14390), (96, 14435), (116, 14579), (120, 14615),

Gene: JAMaL\_17 Start: 15926, Stop: 16537, Start Num: 8

Candidate Starts for JAMaL\_17:

(Start: 8 @15926 has 334 MA's), (17, 15965), (22, 15980), (32, 16016), (46, 16088), (47, 16094), (50, 16106), (56, 16130), (57, 16133), (67, 16184), (87, 16307), (97, 16358), (102, 16394), (103, 16403), (117, 16517),

Gene: JDog\_16 Start: 13712, Stop: 14326, Start Num: 8

Candidate Starts for JDog\_16:

(Start: 8 @13712 has 334 MA's), (Start: 10 @13721 has 1 MA's), (18, 13754), (42, 13856), (73, 14003), (84, 14084), (87, 14093), (96, 14138), (116, 14282), (120, 14318),

Gene: JacAttac\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for JacAttac\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (84, 14360), (87, 14369), (96, 14414), (120, 14594),

Gene: JacoRen57\_28 Start: 25768, Stop: 26319, Start Num: 9

Candidate Starts for JacoRen57\_28:

(Start: 9 @25768 has 60 MA's), (19, 25810), (23, 25828), (26, 25837), (41, 25906), (56, 25966), (66, 26008), (79, 26101), (81, 26116), (114, 26311),

Gene: JaguarMi\_18 Start: 15572, Stop: 16183, Start Num: 8

Candidate Starts for JaguarMi\_18:

(Start: 8 @15572 has 334 MA's), (17, 15611), (22, 15626), (28, 15647), (32, 15662), (42, 15716), (46, 15734), (56, 15776), (67, 15830), (87, 15953), (97, 16004), (102, 16040),

Gene: JakeO\_16 Start: 13712, Stop: 14326, Start Num: 8

Candidate Starts for JakeO\_16:

(Start: 8 @13712 has 334 MA's), (Start: 10 @13721 has 1 MA's), (18, 13754), (42, 13856), (73, 14003), (84, 14084), (87, 14093), (96, 14138), (116, 14282), (120, 14318),

Gene: Jane\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Jane\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: JangoPhett\_17 Start: 13989, Stop: 14603, Start Num: 8

Candidate Starts for JangoPhett\_17:

(Start: 8 @13989 has 334 MA's), (Start: 10 @13998 has 1 MA's), (18, 14031), (42, 14133), (73, 14280), (87, 14370), (96, 14415), (116, 14559), (120, 14595),

Gene: Jesabah\_17 Start: 13717, Stop: 14331, Start Num: 8

Candidate Starts for Jesabah\_17:

(Start: 8 @13717 has 334 MA's), (Start: 10 @13726 has 1 MA's), (18, 13759), (42, 13861), (73, 14008), (87, 14098), (96, 14143), (116, 14287), (120, 14323),

Gene: Jillium\_16 Start: 13710, Stop: 14324, Start Num: 8

Candidate Starts for Jillium\_16:

(Start: 8 @13710 has 334 MA's), (Start: 10 @13719 has 1 MA's), (18, 13752), (42, 13854), (73, 14001), (87, 14091), (96, 14136), (116, 14280), (120, 14316),

Gene: Jiminy\_16 Start: 13552, Stop: 14166, Start Num: 8

Candidate Starts for Jiminy\_16:

(Start: 8 @13552 has 334 MA's), (Start: 10 @13561 has 1 MA's), (18, 13594), (42, 13696), (73, 13843), (87, 13933), (96, 13978), (116, 14122), (120, 14158),

Gene: Jiraiya\_17 Start: 13721, Stop: 14326, Start Num: 10

Candidate Starts for Jiraiya\_17:

(Start: 8 @13712 has 334 MA's), (Start: 10 @13721 has 1 MA's), (18, 13754), (42, 13856), (73, 14003), (84, 14084), (87, 14093), (96, 14138), (116, 14282), (120, 14318),

Gene: Jolene\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Jolene\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533),

Gene: Jolie2\_31 Start: 27699, Stop: 28331, Start Num: 8

Candidate Starts for Jolie2\_31:

(Start: 8 @27699 has 334 MA's), (21, 27750), (25, 27765), (51, 27894), (52, 27897), (63, 27945), (76, 28017), (94, 28146),

Gene: Jonghyun\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Jonghyun\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533),

Gene: JorRay\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for JorRay\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: KLucky39\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for KLucky39\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Kahve\_16 Start: 13719, Stop: 14333, Start Num: 8

Candidate Starts for Kahve\_16:

(Start: 8 @13719 has 334 MA's), (Start: 10 @13728 has 1 MA's), (18, 13761), (42, 13863), (73, 14010), (84, 14091), (87, 14100), (96, 14145), (116, 14289), (120, 14325),

Gene: Kailash\_17 Start: 14006, Stop: 14620, Start Num: 8

Candidate Starts for Kailash\_17:

(Start: 8 @14006 has 334 MA's), (Start: 10 @14015 has 1 MA's), (18, 14048), (42, 14150), (73, 14297), (87, 14387), (96, 14432), (116, 14576), (120, 14612),

Gene: KarasumaRum\_20 Start: 15730, Stop: 16320, Start Num: 10

Candidate Starts for KarasumaRum\_20:

(Start: 8 @15721 has 334 MA's), (Start: 10 @15730 has 1 MA's), (15, 15751), (26, 15790), (53, 15913), (56, 15925), (57, 15928), (102, 16189), (118, 16312),

Gene: Kareem\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Kareem\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Kasen3\_31 Start: 27108, Stop: 27725, Start Num: 9

Candidate Starts for Kasen3\_31:

(Start: 9 @27108 has 60 MA's), (21, 27156), (30, 27189), (33, 27198), (37, 27225), (40, 27249), (47, 27282), (49, 27291), (52, 27303), (55, 27312), (71, 27414), (74, 27429), (78, 27471), (92, 27534), (106, 27636),

Gene: Katniss\_17 Start: 14016, Stop: 14630, Start Num: 8

Candidate Starts for Katniss\_17:

(Start: 8 @14016 has 334 MA's), (Start: 10 @14025 has 1 MA's), (18, 14058), (42, 14160), (73, 14307), (87, 14397), (96, 14442), (116, 14586), (120, 14622),

Gene: Keitherie\_17 Start: 14017, Stop: 14631, Start Num: 8

Candidate Starts for Keitherie\_17:

(Start: 8 @14017 has 334 MA's), (Start: 10 @14026 has 1 MA's), (18, 14059), (42, 14161), (73, 14308), (84, 14389), (87, 14398), (96, 14443), (116, 14587), (120, 14623),

Gene: Khan1\_17 Start: 13712, Stop: 14326, Start Num: 8

Candidate Starts for Khan1\_17:

(Start: 8 @13712 has 334 MA's), (Start: 10 @13721 has 1 MA's), (18, 13754), (42, 13856), (73, 14003), (84, 14084), (87, 14093), (96, 14138), (120, 14318),

Gene: Kikipoo\_17 Start: 14009, Stop: 14623, Start Num: 8

Candidate Starts for Kikipoo\_17:

(Start: 8 @14009 has 334 MA's), (Start: 10 @14018 has 1 MA's), (18, 14051), (42, 14153), (73, 14300), (87, 14390), (96, 14435), (116, 14579), (120, 14615),

Gene: Kimbrough\_17 Start: 13707, Stop: 14321, Start Num: 8

Candidate Starts for Kimbrough\_17:

(Start: 8 @13707 has 334 MA's), (Start: 10 @13716 has 1 MA's), (18, 13749), (42, 13851), (73, 13998), (87, 14088), (96, 14133), (116, 14277), (120, 14313),

Gene: Kinbote\_36 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Kinbote\_36:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: KingTut\_16 Start: 13699, Stop: 14313, Start Num: 8

Candidate Starts for KingTut\_16:

(Start: 8 @13699 has 334 MA's), (Start: 10 @13708 has 1 MA's), (18, 13741), (42, 13843), (73, 13990), (87, 14080), (96, 14125), (116, 14269), (120, 14305),

Gene: KingVeVeVe\_17 Start: 13986, Stop: 14600, Start Num: 8

Candidate Starts for KingVeVeVe\_17:

(Start: 8 @13986 has 334 MA's), (Start: 10 @13995 has 1 MA's), (18, 14028), (42, 14130), (73, 14277), (84, 14358), (87, 14367), (96, 14412), (116, 14556), (120, 14592),

Gene: KlimbOn\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for KlimbOn\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Kloppinator\_17 Start: 14013, Stop: 14627, Start Num: 8

Candidate Starts for Kloppinator\_17:

(Start: 8 @14013 has 334 MA's), (Start: 10 @14022 has 1 MA's), (18, 14055), (42, 14157), (73, 14304), (87, 14394), (96, 14439), (116, 14583), (120, 14619),

Gene: Knocker\_21 Start: 18098, Stop: 18703, Start Num: 8

Candidate Starts for Knocker\_21:

(Start: 8 @18098 has 334 MA's), (Start: 9 @18101 has 60 MA's), (Start: 10 @18107 has 1 MA's), (17, 18137), (23, 18158), (26, 18167), (32, 18188), (37, 18218), (46, 18260), (58, 18308), (60, 18329), (67, 18356), (69, 18371), (77, 18428), (80, 18449), (84, 18470), (87, 18479), (96, 18524), (102, 18566), (112, 18641), (118, 18689),

Gene: Kwadwo\_16 Start: 13698, Stop: 14312, Start Num: 8

Candidate Starts for Kwadwo\_16:

(Start: 8 @13698 has 334 MA's), (Start: 10 @13707 has 1 MA's), (18, 13740), (42, 13842), (73, 13989), (84, 14070), (87, 14079), (96, 14124), (120, 14304),

Gene: Kwksand96\_16 Start: 13562, Stop: 14176, Start Num: 8

Candidate Starts for Kwksand96\_16:

(Start: 8 @13562 has 334 MA's), (Start: 10 @13571 has 1 MA's), (18, 13604), (42, 13706), (73, 13853), (84, 13934), (87, 13943), (96, 13988), (120, 14168),

Gene: Labeouficaum\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for Labeouficaum\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Lambano\_16 Start: 14678, Stop: 15289, Start Num: 8

Candidate Starts for Lambano\_16:

(Start: 8 @14678 has 334 MA's), (17, 14717), (22, 14732), (32, 14768), (46, 14840), (50, 14858), (56, 14882), (57, 14885), (67, 14936), (87, 15059), (97, 15110), (102, 15146), (103, 15155), (117, 15269),

Gene: LasagnaCat\_17 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for LasagnaCat\_17:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: Lasso\_17 Start: 13976, Stop: 14590, Start Num: 8

Candidate Starts for Lasso\_17:

(Start: 8 @13976 has 334 MA's), (Start: 10 @13985 has 1 MA's), (18, 14018), (42, 14120), (73, 14267), (84, 14348), (87, 14357), (96, 14402), (116, 14546), (120, 14582),



Gene: LeeLot\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for LeeLot\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (120, 14603),

Gene: Lego3393\_17 Start: 14013, Stop: 14627, Start Num: 8

Candidate Starts for Lego3393\_17:

(Start: 8 @14013 has 334 MA's), (Start: 10 @14022 has 1 MA's), (18, 14055), (42, 14157), (73, 14304), (87, 14394), (96, 14439), (116, 14583), (120, 14619),

Gene: Legolas\_16 Start: 13714, Stop: 14328, Start Num: 8

Candidate Starts for Legolas\_16:

(Start: 8 @13714 has 334 MA's), (Start: 10 @13723 has 1 MA's), (18, 13756), (42, 13858), (73, 14005), (84, 14086), (87, 14095), (96, 14140), (120, 14320),

Gene: LeiMonet\_17 Start: 13706, Stop: 14320, Start Num: 8

Candidate Starts for LeiMonet\_17:

(Start: 8 @13706 has 334 MA's), (Start: 10 @13715 has 1 MA's), (18, 13748), (42, 13850), (73, 13997), (87, 14087), (96, 14132), (116, 14276), (120, 14312),

Gene: LemonSlice\_17 Start: 13708, Stop: 14322, Start Num: 8

Candidate Starts for LemonSlice\_17:

(Start: 8 @13708 has 334 MA's), (Start: 10 @13717 has 1 MA's), (18, 13750), (42, 13852), (73, 13999), (87, 14089), (96, 14134), (116, 14278), (120, 14314),

Gene: Lemuria\_32 Start: 28819, Stop: 29400, Start Num: 8

Candidate Starts for Lemuria\_32:

(Start: 8 @28819 has 334 MA's), (21, 28867), (24, 28879), (57, 29032), (67, 29104), (81, 29200), (85, 29221), (86, 29224),

Gene: Leopard\_49 Start: 38220, Stop: 38792, Start Num: 14

Candidate Starts for Leopard\_49:

(Start: 14 @38220 has 3 MA's), (27, 38268), (38, 38325), (49, 38373), (53, 38388), (56, 38400), (58, 38406), (59, 38418), (73, 38487), (81, 38550), (88, 38580), (90, 38586), (91, 38592),

Gene: Liefie\_31 Start: 27105, Stop: 27722, Start Num: 9

Candidate Starts for Liefie\_31:

(Start: 9 @27105 has 60 MA's), (21, 27153), (30, 27186), (33, 27195), (40, 27246), (47, 27279), (49, 27288), (52, 27300), (55, 27309), (71, 27411), (74, 27426), (78, 27468), (92, 27531),

Gene: LilHazelnut\_36 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for LilHazelnut\_36:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: LilMcDreamy\_17 Start: 16197, Stop: 16790, Start Num: 8

Candidate Starts for LilMcDreamy\_17:

(Start: 8 @16197 has 334 MA's), (26, 16266), (42, 16341), (54, 16392), (57, 16404), (72, 16482), (91, 16593), (94, 16614), (95, 16617), (106, 16692), (111, 16725),

Gene: Lolalove\_17 Start: 15742, Stop: 16350, Start Num: 8

Candidate Starts for Lolalove\_17:

(Start: 8 @15742 has 334 MA's), (17, 15781), (22, 15796), (32, 15832), (42, 15886), (46, 15904), (50, 15922), (56, 15946), (67, 16000), (87, 16123), (92, 16141), (97, 16174), (102, 16210), (117, 16330),

Gene: Longacauda\_16 Start: 13700, Stop: 14314, Start Num: 8

Candidate Starts for Longacauda\_16:

(Start: 8 @13700 has 334 MA's), (Start: 10 @13709 has 1 MA's), (18, 13742), (42, 13844), (73, 13991), (87, 14081), (96, 14126), (116, 14270), (120, 14306),

Gene: Lopsy\_16 Start: 13565, Stop: 14170, Start Num: 10

Candidate Starts for Lopsy\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: LostAndPhound\_16 Start: 13710, Stop: 14324, Start Num: 8

Candidate Starts for LostAndPhound\_16:

(Start: 8 @13710 has 334 MA's), (Start: 10 @13719 has 1 MA's), (18, 13752), (42, 13854), (73, 14001), (84, 14082), (87, 14091), (96, 14136), (116, 14280), (120, 14316),

Gene: LouisV14\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for LouisV14\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: LuckyMarjie\_16 Start: 13722, Stop: 14336, Start Num: 8

Candidate Starts for LuckyMarjie\_16:

(Start: 8 @13722 has 334 MA's), (Start: 10 @13731 has 1 MA's), (18, 13764), (42, 13866), (73, 14013), (87, 14103), (96, 14148), (116, 14292), (120, 14328),

Gene: Luke\_36 Start: 30284, Stop: 30904, Start Num: 8

Candidate Starts for Luke\_36:

(5, 30233), (Start: 8 @30284 has 334 MA's), (20, 30332), (35, 30386), (37, 30404), (49, 30470), (66, 30560), (71, 30593), (81, 30668), (84, 30686), (91, 30710), (94, 30731), (96, 30740), (101, 30776), (102, 30782), (113, 30860),

Gene: Lulumae\_16 Start: 13699, Stop: 14313, Start Num: 8

Candidate Starts for Lulumae\_16:

(Start: 8 @13699 has 334 MA's), (Start: 10 @13708 has 1 MA's), (18, 13741), (42, 13843), (73, 13990), (84, 14071), (87, 14080), (96, 14125), (120, 14305),

Gene: Lulwa\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for Lulwa\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (84, 14360), (87, 14369), (96, 14414), (116, 14558), (120, 14594),

Gene: Lumine\_16 Start: 13692, Stop: 14306, Start Num: 8

Candidate Starts for Lumine\_16:

(Start: 8 @13692 has 334 MA's), (Start: 10 @13701 has 1 MA's), (18, 13734), (42, 13836), (73, 13983), (84, 14064), (87, 14073), (96, 14118), (120, 14298),

Gene: Luna22\_35 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Luna22\_35:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: MOOREtheMARYer\_32 Start: 29110, Stop: 29769, Start Num: 8

Candidate Starts for MOOREtheMARYer\_32:

(Start: 8 @29110 has 334 MA's), (Start: 10 @29122 has 1 MA's), (13, 29137), (17, 29152), (21, 29164), (49, 29299), (96, 29593), (102, 29635),

Gene: MRabcd\_16 Start: 13701, Stop: 14315, Start Num: 8

Candidate Starts for MRabcd\_16:

(Start: 8 @13701 has 334 MA's), (Start: 10 @13710 has 1 MA's), (18, 13743), (42, 13845), (73, 13992), (87, 14082), (96, 14127), (116, 14271), (120, 14307),

Gene: Mag7\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for Mag7\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Magic8\_17 Start: 13994, Stop: 14608, Start Num: 8

Candidate Starts for Magic8\_17:

(Start: 8 @13994 has 334 MA's), (Start: 10 @14003 has 1 MA's), (18, 14036), (42, 14138), (73, 14285), (87, 14375), (96, 14420), (116, 14564), (120, 14600),

Gene: Magpie\_17 Start: 15930, Stop: 16541, Start Num: 8

Candidate Starts for Magpie\_17:

(Start: 8 @15930 has 334 MA's), (17, 15969), (22, 15984), (28, 16005), (32, 16020), (42, 16074), (46, 16092), (50, 16110), (56, 16134), (57, 16137), (87, 16311), (97, 16362), (117, 16521),

Gene: Maliketh\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Maliketh\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Mana\_16 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Mana\_16:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Manad\_16 Start: 13554, Stop: 14168, Start Num: 8

Candidate Starts for Manad\_16:

(Start: 8 @13554 has 334 MA's), (Start: 10 @13563 has 1 MA's), (18, 13596), (42, 13698), (73, 13845), (84, 13926), (87, 13935), (96, 13980), (116, 14124), (120, 14160),

Gene: Marmie\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Marmie\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Maru\_16 Start: 13702, Stop: 14316, Start Num: 8

Candidate Starts for Maru\_16:

(Start: 8 @13702 has 334 MA's), (Start: 10 @13711 has 1 MA's), (18, 13744), (42, 13846), (73, 13993), (87, 14083), (96, 14128), (116, 14272), (120, 14308),

Gene: Maskar\_16 Start: 13544, Stop: 14158, Start Num: 8

Candidate Starts for Maskar\_16:

(Start: 8 @13544 has 334 MA's), (Start: 10 @13553 has 1 MA's), (18, 13586), (42, 13688), (73, 13835), (87, 13925), (96, 13970), (116, 14114), (120, 14150),

Gene: Matalotodo\_17 Start: 13992, Stop: 14468, Start Num: 8

Candidate Starts for Matalotodo\_17:

(Start: 8 @13992 has 334 MA's), (Start: 10 @14001 has 1 MA's), (18, 14034), (42, 14136), (73, 14283), (84, 14364), (87, 14373), (96, 14418),

Gene: Mcshane\_16 Start: 13698, Stop: 14312, Start Num: 8

Candidate Starts for Mcshane\_16:

(Start: 8 @13698 has 334 MA's), (Start: 10 @13707 has 1 MA's), (18, 13740), (42, 13842), (73, 13989), (87, 14079), (96, 14124), (116, 14268), (120, 14304),

Gene: Mecca\_16 Start: 13695, Stop: 14309, Start Num: 8

Candidate Starts for Mecca\_16:

(Start: 8 @13695 has 334 MA's), (Start: 10 @13704 has 1 MA's), (18, 13737), (42, 13839), (73, 13986), (87, 14076), (96, 14121), (116, 14265), (120, 14301),

Gene: Megamind20\_17 Start: 13717, Stop: 14331, Start Num: 8

Candidate Starts for Megamind20\_17:

(Start: 8 @13717 has 334 MA's), (Start: 10 @13726 has 1 MA's), (18, 13759), (42, 13861), (73, 14008), (84, 14089), (87, 14098), (96, 14143), (116, 14287), (120, 14323),

Gene: Megatron\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Megatron\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Melc17\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for Melc17\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (87, 14369), (96, 14414), (120, 14594),

Gene: MelsMeow\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for MelsMeow\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (84, 13928), (87, 13937), (96, 13982), (120, 14162),

Gene: Mercurio\_33 Start: 29310, Stop: 29912, Start Num: 8

Candidate Starts for Mercurio\_33:

(Start: 8 @29310 has 334 MA's), (24, 29370), (33, 29400), (67, 29616), (85, 29733), (86, 29736), (107, 29832),

Gene: Mesh1\_17 Start: 14006, Stop: 14620, Start Num: 8

Candidate Starts for Mesh1\_17:

(Start: 8 @14006 has 334 MA's), (Start: 10 @14015 has 1 MA's), (18, 14048), (42, 14150), (73, 14297), (87, 14387), (96, 14432), (116, 14576), (120, 14612),

Gene: Mesmerelda\_17 Start: 13698, Stop: 14312, Start Num: 8

Candidate Starts for Mesmerelda\_17:

(Start: 8 @13698 has 334 MA's), (Start: 10 @13707 has 1 MA's), (18, 13740), (42, 13842), (73, 13989), (87, 14079), (96, 14124), (116, 14268), (120, 14304),

Gene: MichaelPhcott\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for MichaelPhcott\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Mikota\_17 Start: 13983, Stop: 14597, Start Num: 8

Candidate Starts for Mikota\_17:

(Start: 8 @13983 has 334 MA's), (Start: 10 @13992 has 1 MA's), (18, 14025), (42, 14127), (73, 14274), (84, 14355), (87, 14364), (96, 14409), (116, 14553), (120, 14589),

Gene: MiniBoss\_17 Start: 13985, Stop: 14599, Start Num: 8

Candidate Starts for MiniBoss\_17:

(Start: 8 @13985 has 334 MA's), (Start: 10 @13994 has 1 MA's), (18, 14027), (42, 14129), (73, 14276), (84, 14357), (87, 14366), (96, 14411), (116, 14555), (120, 14591),

Gene: MitKao\_17 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for MitKao\_17:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Mithril\_17 Start: 15745, Stop: 16356, Start Num: 8

Candidate Starts for Mithril\_17:

(Start: 8 @15745 has 334 MA's), (17, 15784), (22, 15799), (32, 15835), (42, 15889), (46, 15907), (50, 15925), (56, 15949), (67, 16003), (87, 16126), (97, 16177), (102, 16213), (117, 16336),

Gene: Morgushi\_17 Start: 13708, Stop: 14322, Start Num: 8

Candidate Starts for Morgushi\_17:

(Start: 8 @13708 has 334 MA's), (Start: 10 @13717 has 1 MA's), (18, 13750), (42, 13852), (73, 13999), (84, 14080), (87, 14089), (96, 14134), (120, 14314),

Gene: Morty\_17 Start: 14006, Stop: 14620, Start Num: 8

Candidate Starts for Morty\_17:

(Start: 8 @14006 has 334 MA's), (Start: 10 @14015 has 1 MA's), (18, 14048), (42, 14150), (73, 14297), (87, 14387), (96, 14432), (116, 14576), (120, 14612),

Gene: Mosaic\_16 Start: 13711, Stop: 14325, Start Num: 8

Candidate Starts for Mosaic\_16:

(Start: 8 @13711 has 334 MA's), (Start: 10 @13720 has 1 MA's), (18, 13753), (42, 13855), (73, 14002), (84, 14083), (87, 14092), (96, 14137), (116, 14281), (120, 14317),

Gene: Mowgli\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Mowgli\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: MrPhizzler\_16 Start: 13709, Stop: 14323, Start Num: 8

Candidate Starts for MrPhizzler\_16:

(Start: 8 @13709 has 334 MA's), (Start: 10 @13718 has 1 MA's), (18, 13751), (42, 13853), (73, 14000), (84, 14081), (87, 14090), (96, 14135), (120, 14315),

Gene: Mudslide\_17 Start: 15990, Stop: 16601, Start Num: 8

Candidate Starts for Mudslide\_17:

(Start: 8 @15990 has 334 MA's), (17, 16029), (22, 16044), (28, 16065), (32, 16080), (42, 16134), (46, 16152), (50, 16170), (56, 16194), (57, 16197), (87, 16371), (97, 16422), (117, 16581),

Gene: Mulan\_16 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Mulan\_16:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Murdoc\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Murdoc\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (120, 14603),

Gene: Mutante\_16 Start: 13707, Stop: 14321, Start Num: 8

Candidate Starts for Mutante\_16:

(Start: 8 @13707 has 334 MA's), (Start: 10 @13716 has 1 MA's), (18, 13749), (42, 13851), (73, 13998), (84, 14079), (87, 14088), (96, 14133), (116, 14277), (120, 14313),

Gene: Mysterious\_19 Start: 15850, Stop: 16440, Start Num: 10

Candidate Starts for Mysterious\_19:

(Start: 8 @15841 has 334 MA's), (Start: 10 @15850 has 1 MA's), (15, 15871), (21, 15892), (22, 15895), (26, 15910), (46, 16003), (53, 16033), (56, 16045), (57, 16048), (67, 16099), (73, 16132), (80, 16192), (102, 16309), (118, 16432),

Gene: Nacho\_0017 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Nacho\_0017:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Nanao\_16 Start: 14677, Stop: 15288, Start Num: 8

Candidate Starts for Nanao\_16:

(Start: 8 @14677 has 334 MA's), (17, 14716), (22, 14731), (32, 14767), (46, 14839), (50, 14857), (56, 14881), (57, 14884), (67, 14935), (87, 15058), (97, 15109), (102, 15145), (103, 15154), (117, 15268),

Gene: Nangang\_18 Start: 15565, Stop: 16164, Start Num: 8

Candidate Starts for Nangang\_18:

(Start: 8 @15565 has 334 MA's), (Start: 10 @15574 has 1 MA's), (15, 15595), (26, 15634), (50, 15745), (53, 15757), (56, 15769), (57, 15772), (67, 15823), (80, 15916), (102, 16033), (118, 16156),

Gene: Nathan\_18 Start: 14007, Stop: 14621, Start Num: 8

Candidate Starts for Nathan\_18:

(Start: 8 @14007 has 334 MA's), (Start: 10 @14016 has 1 MA's), (18, 14049), (42, 14151), (73, 14298), (87, 14388), (96, 14433), (116, 14577), (120, 14613),

Gene: Nehemiah\_17 Start: 15850, Stop: 16440, Start Num: 10

Candidate Starts for Nehemiah\_17:

(Start: 8 @15841 has 334 MA's), (Start: 10 @15850 has 1 MA's), (15, 15871), (21, 15892), (22, 15895), (26, 15910), (46, 16003), (53, 16033), (56, 16045), (57, 16048), (67, 16099), (73, 16132), (80, 16192),

(87, 16222), (102, 16309), (118, 16432),

Gene: Newman\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Newman\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Nicole21\_17 Start: 13989, Stop: 14603, Start Num: 8

Candidate Starts for Nicole21\_17:

(Start: 8 @13989 has 334 MA's), (Start: 10 @13998 has 1 MA's), (18, 14031), (42, 14133), (73, 14280), (87, 14370), (96, 14415), (116, 14559), (120, 14595),

Gene: Nigel\_15 Start: 14594, Stop: 15205, Start Num: 8

Candidate Starts for Nigel\_15:

(Start: 8 @14594 has 334 MA's), (17, 14633), (22, 14648), (28, 14669), (32, 14684), (37, 14714), (42, 14738), (46, 14756), (50, 14774), (56, 14798), (67, 14852), (102, 15062), (103, 15071), (117, 15185), (119, 15188),

Gene: Numberten\_17 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for Numberten\_17:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (84, 14372), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: Nyala\_16 Start: 13699, Stop: 14313, Start Num: 8

Candidate Starts for Nyala\_16:

(Start: 8 @13699 has 334 MA's), (Start: 10 @13708 has 1 MA's), (18, 13741), (42, 13843), (73, 13990), (87, 14080), (96, 14125), (116, 14269), (120, 14305),

Gene: OBUpride\_36 Start: 30323, Stop: 30943, Start Num: 8

Candidate Starts for OBUpride\_36:

(5, 30272), (Start: 8 @30323 has 334 MA's), (20, 30371), (35, 30425), (37, 30443), (49, 30509), (66, 30599), (71, 30632), (81, 30707), (84, 30725), (91, 30749), (94, 30770), (96, 30779), (101, 30815), (102, 30821), (113, 30899),

Gene: OSmaximus\_17 Start: 14007, Stop: 14621, Start Num: 8

Candidate Starts for OSmaximus\_17:

(Start: 8 @14007 has 334 MA's), (Start: 10 @14016 has 1 MA's), (18, 14049), (42, 14151), (73, 14298), (87, 14388), (96, 14433), (116, 14577), (120, 14613),

Gene: OctaviousRex\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for OctaviousRex\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Olak\_16 Start: 13696, Stop: 14310, Start Num: 8

Candidate Starts for Olak\_16:

(Start: 8 @13696 has 334 MA's), (Start: 10 @13705 has 1 MA's), (18, 13738), (42, 13840), (73, 13987), (87, 14077), (96, 14122), (116, 14266), (120, 14302),

Gene: Olga\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Olga\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Oline\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for Oline\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Olive\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for Olive\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (84, 14360), (87, 14369), (96, 14414), (120, 14594),

Gene: OliverWalter\_17 Start: 14005, Stop: 14619, Start Num: 8

Candidate Starts for OliverWalter\_17:

(Start: 8 @14005 has 334 MA's), (Start: 10 @14014 has 1 MA's), (18, 14047), (42, 14149), (73, 14296), (84, 14377), (87, 14386), (96, 14431), (116, 14575), (120, 14611),

Gene: Omniscient\_17 Start: 14006, Stop: 14620, Start Num: 8

Candidate Starts for Omniscient\_17:

(Start: 8 @14006 has 334 MA's), (Start: 10 @14015 has 1 MA's), (18, 14048), (42, 14150), (73, 14297), (87, 14387), (96, 14432), (116, 14576), (120, 14612),

Gene: Onyinye\_50 Start: 38102, Stop: 38674, Start Num: 14

Candidate Starts for Onyinye\_50:

(Start: 14 @38102 has 3 MA's), (27, 38150), (38, 38207), (49, 38255), (50, 38258), (53, 38270), (56, 38282), (58, 38288), (59, 38300), (73, 38369), (81, 38432), (88, 38462), (90, 38468), (91, 38474),

Gene: Oosterbaan\_17 Start: 13998, Stop: 14612, Start Num: 8

Candidate Starts for Oosterbaan\_17:

(Start: 8 @13998 has 334 MA's), (Start: 10 @14007 has 1 MA's), (18, 14040), (42, 14142), (73, 14289), (84, 14370), (87, 14379), (96, 14424), (120, 14604),

Gene: Orfeu\_16 Start: 13697, Stop: 14311, Start Num: 8

Candidate Starts for Orfeu\_16:

(Start: 8 @13697 has 334 MA's), (Start: 10 @13706 has 1 MA's), (18, 13739), (42, 13841), (73, 13988), (87, 14078), (96, 14123), (116, 14267), (120, 14303),

Gene: Orion\_17 Start: 13998, Stop: 14612, Start Num: 8

Candidate Starts for Orion\_17:

(Start: 8 @13998 has 334 MA's), (Start: 10 @14007 has 1 MA's), (18, 14040), (42, 14142), (73, 14289), (87, 14379), (96, 14424), (116, 14568), (120, 14604),

Gene: Orwigg\_17 Start: 13690, Stop: 14304, Start Num: 8

Candidate Starts for Orwigg\_17:

(Start: 8 @13690 has 334 MA's), (Start: 10 @13699 has 1 MA's), (18, 13732), (42, 13834), (73, 13981), (87, 14071), (96, 14116), (116, 14260), (120, 14296),

Gene: PG1\_17 Start: 14010, Stop: 14624, Start Num: 8

Candidate Starts for PG1\_17:

(Start: 8 @14010 has 334 MA's), (Start: 10 @14019 has 1 MA's), (18, 14052), (42, 14154), (73, 14301), (87, 14391), (96, 14436), (116, 14580), (120, 14616),



Gene: Pace1224\_30 Start: 28613, Stop: 29269, Start Num: 8

Candidate Starts for Pace1224\_30:

(6, 28592), (Start: 8 @28613 has 334 MA's), (Start: 10 @28622 has 1 MA's), (21, 28664), (30, 28697), (37, 28733), (43, 28769), (49, 28799), (57, 28829), (94, 29084), (101, 29129), (102, 29135),

Gene: Pacifista\_16 Start: 13701, Stop: 14315, Start Num: 8

Candidate Starts for Pacifista\_16:

(Start: 8 @13701 has 334 MA's), (Start: 10 @13710 has 1 MA's), (18, 13743), (42, 13845), (73, 13992), (87, 14082), (96, 14127), (116, 14271), (120, 14307),

Gene: Paito\_31 Start: 27329, Stop: 27949, Start Num: 8

Candidate Starts for Paito\_31:

(Start: 8 @27329 has 334 MA's), (20, 27377), (30, 27413), (31, 27416), (33, 27422), (40, 27473), (47, 27506), (52, 27527), (57, 27545), (81, 27713), (92, 27758), (109, 27881),

Gene: Peeb\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Peeb\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (40, 27248), (47, 27281), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: PenguinLover67\_20 Start: 16988, Stop: 17584, Start Num: 8

Candidate Starts for PenguinLover67\_20:

(Start: 8 @16988 has 334 MA's), (Start: 10 @16997 has 1 MA's), (26, 17057), (47, 17156), (67, 17246), (99, 17435), (102, 17456),

Gene: Periodt\_31 Start: 27098, Stop: 27715, Start Num: 9

Candidate Starts for Periodt\_31:

(Start: 9 @27098 has 60 MA's), (21, 27146), (30, 27179), (33, 27188), (40, 27239), (47, 27272), (49, 27281), (52, 27293), (55, 27302), (71, 27404), (74, 27419), (78, 27461), (92, 27524),

Gene: Phamished\_17 Start: 14003, Stop: 14617, Start Num: 8

Candidate Starts for Phamished\_17:

(Start: 8 @14003 has 334 MA's), (Start: 10 @14012 has 1 MA's), (18, 14045), (42, 14147), (73, 14294), (87, 14384), (96, 14429), (116, 14573), (120, 14609),

Gene: Phareon\_17 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Phareon\_17:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: PhatCats2014\_17 Start: 14013, Stop: 14627, Start Num: 8

Candidate Starts for PhatCats2014\_17:

(Start: 8 @14013 has 334 MA's), (Start: 10 @14022 has 1 MA's), (18, 14055), (42, 14157), (73, 14304), (87, 14394), (96, 14439), (116, 14583), (120, 14619),

Gene: PhatLouie\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for PhatLouie\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (84, 14369), (87, 14378), (96, 14423), (120, 14603),

Gene: Phelemich\_18 Start: 15845, Stop: 16444, Start Num: 8

Candidate Starts for Phelemich\_18:

(Start: 8 @15845 has 334 MA's), (Start: 10 @15854 has 1 MA's), (21, 15896), (22, 15899), (26, 15914), (46, 16007), (53, 16037), (56, 16049), (57, 16052), (67, 16103), (73, 16136), (80, 16196), (102, 16313), (118, 16436),

Gene: PhenghisKhan\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for PhenghisKhan\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Pherdinand\_17 Start: 14001, Stop: 14615, Start Num: 8

Candidate Starts for Pherdinand\_17:

(Start: 8 @14001 has 334 MA's), (Start: 10 @14010 has 1 MA's), (18, 14043), (42, 14145), (73, 14292), (87, 14382), (96, 14427), (116, 14571), (120, 14607),

Gene: Phergie\_16 Start: 13550, Stop: 14164, Start Num: 8

Candidate Starts for Phergie\_16:

(Start: 8 @13550 has 334 MA's), (Start: 10 @13559 has 1 MA's), (18, 13592), (42, 13694), (73, 13841), (87, 13931), (96, 13976), (116, 14120), (120, 14156),

Gene: Phipps\_17 Start: 13976, Stop: 14590, Start Num: 8

Candidate Starts for Phipps\_17:

(Start: 8 @13976 has 334 MA's), (Start: 10 @13985 has 1 MA's), (18, 14018), (42, 14120), (73, 14267), (84, 14348), (87, 14357), (96, 14402), (120, 14582),

Gene: Phish\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Phish\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Phleuron\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for Phleuron\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: PhrankReynolds\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for PhrankReynolds\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Phreak\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Phreak\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: PhrodoBaggins\_16 Start: 13991, Stop: 14605, Start Num: 8

Candidate Starts for PhrodoBaggins\_16:

(Start: 8 @13991 has 334 MA's), (Start: 10 @14000 has 1 MA's), (18, 14033), (42, 14135), (73, 14282), (84, 14363), (87, 14372), (96, 14417), (116, 14561), (120, 14597),

Gene: Phunky\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Phunky\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (84, 14369), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Piglet\_0016 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for Piglet\_0016:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: PinheadLarry\_17 Start: 13716, Stop: 14330, Start Num: 8

Candidate Starts for PinheadLarry\_17:

(Start: 8 @13716 has 334 MA's), (Start: 10 @13725 has 1 MA's), (18, 13758), (42, 13860), (73, 14007), (84, 14088), (87, 14097), (96, 14142), (120, 14322),

Gene: PinkYoshi\_31 Start: 27098, Stop: 27715, Start Num: 9

Candidate Starts for PinkYoshi\_31:

(Start: 9 @27098 has 60 MA's), (21, 27146), (30, 27179), (33, 27188), (37, 27215), (40, 27239), (47, 27272), (49, 27281), (52, 27293), (55, 27302), (71, 27404), (74, 27419), (78, 27461), (92, 27524), (106, 27626),

Gene: Pinkman\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for Pinkman\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: Pinnie\_32 Start: 29481, Stop: 30140, Start Num: 8

Candidate Starts for Pinnie\_32:

(Start: 8 @29481 has 334 MA's), (Start: 10 @29493 has 1 MA's), (17, 29523), (30, 29568), (37, 29604), (51, 29679), (102, 30006),

Gene: Pipsqueak\_17 Start: 14003, Stop: 14617, Start Num: 8

Candidate Starts for Pipsqueak\_17:

(Start: 8 @14003 has 334 MA's), (Start: 10 @14012 has 1 MA's), (18, 14045), (42, 14147), (73, 14294), (84, 14375), (87, 14384), (96, 14429), (120, 14609),

Gene: Placalicious\_16 Start: 13698, Stop: 14312, Start Num: 8

Candidate Starts for Placalicious\_16:

(Start: 8 @13698 has 334 MA's), (Start: 10 @13707 has 1 MA's), (18, 13740), (42, 13842), (73, 13989), (87, 14079), (96, 14124), (116, 14268), (120, 14304),

Gene: Plagueis\_31 Start: 26942, Stop: 27559, Start Num: 9

Candidate Starts for Plagueis\_31:

(Start: 9 @26942 has 60 MA's), (21, 26990), (30, 27023), (33, 27032), (37, 27059), (40, 27083), (47, 27116), (49, 27125), (52, 27137), (55, 27146), (71, 27248), (74, 27263), (78, 27305), (92, 27368), (106, 27470),

Gene: Plmatters\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Plmatters\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Podrick\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for Podrick\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (84, 14360), (87, 14369), (96, 14414), (116, 14558), (120, 14594),

Gene: Pops\_17 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for Pops\_17:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (84, 14372), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: Poster\_16 Start: 14678, Stop: 15289, Start Num: 8

Candidate Starts for Poster\_16:

(Start: 8 @14678 has 334 MA's), (17, 14717), (22, 14732), (32, 14768), (46, 14840), (50, 14858), (56, 14882), (57, 14885), (67, 14936), (87, 15059), (97, 15110), (102, 15146), (103, 15155), (117, 15269),

Gene: Potter\_16 Start: 13711, Stop: 14325, Start Num: 8

Candidate Starts for Potter\_16:

(Start: 8 @13711 has 334 MA's), (Start: 10 @13720 has 1 MA's), (18, 13753), (42, 13855), (73, 14002), (87, 14092), (96, 14137), (116, 14281), (120, 14317),

Gene: Prickles\_17 Start: 13991, Stop: 14605, Start Num: 8

Candidate Starts for Prickles\_17:

(Start: 8 @13991 has 334 MA's), (Start: 10 @14000 has 1 MA's), (18, 14033), (42, 14135), (73, 14282), (87, 14372), (96, 14417), (116, 14561), (120, 14597),

Gene: Prince\_17 Start: 15902, Stop: 16513, Start Num: 8

Candidate Starts for Prince\_17:

(Start: 8 @15902 has 334 MA's), (17, 15941), (22, 15956), (28, 15977), (32, 15992), (42, 16046), (46, 16064), (50, 16082), (56, 16106), (57, 16109), (87, 16283), (97, 16334), (117, 16493),

Gene: ProfessorX\_17 Start: 13989, Stop: 14603, Start Num: 8

Candidate Starts for ProfessorX\_17:

(Start: 8 @13989 has 334 MA's), (Start: 10 @13998 has 1 MA's), (18, 14031), (42, 14133), (73, 14280), (84, 14361), (87, 14370), (96, 14415), (120, 14595),

Gene: Puhltonio\_17 Start: 14006, Stop: 14620, Start Num: 8

Candidate Starts for Puhltonio\_17:

(Start: 8 @14006 has 334 MA's), (Start: 10 @14015 has 1 MA's), (18, 14048), (42, 14150), (73, 14297), (84, 14378), (87, 14387), (96, 14432), (120, 14612),

Gene: QueenBeane\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for QueenBeane\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: QueenPie\_17 Start: 16276, Stop: 16887, Start Num: 8

Candidate Starts for QueenPie\_17:

(Start: 8 @16276 has 334 MA's), (17, 16315), (22, 16330), (32, 16366), (46, 16438), (47, 16444), (50, 16456), (56, 16480), (57, 16483), (67, 16534), (87, 16657), (97, 16708), (102, 16744), (103, 16753), (117, 16867),

Gene: Quisquilliae\_17 Start: 14012, Stop: 14626, Start Num: 8

Candidate Starts for Quisquilliae\_17:

(Start: 8 @14012 has 334 MA's), (Start: 10 @14021 has 1 MA's), (18, 14054), (42, 14156), (73, 14303), (84, 14384), (87, 14393), (96, 14438), (116, 14582), (120, 14618),

Gene: Rabbs\_31 Start: 27190, Stop: 27807, Start Num: 9

Candidate Starts for Rabbs\_31:

(Start: 9 @27190 has 60 MA's), (21, 27238), (30, 27271), (33, 27280), (40, 27331), (47, 27364), (49, 27373), (52, 27385), (55, 27394), (71, 27496), (74, 27511), (78, 27553), (92, 27616),

Gene: RawrgerThat\_17 Start: 15739, Stop: 16350, Start Num: 8

Candidate Starts for RawrgerThat\_17:

(Start: 8 @15739 has 334 MA's), (17, 15778), (22, 15793), (28, 15814), (32, 15829), (42, 15883), (46, 15901), (50, 15919), (56, 15943), (67, 15997), (87, 16120), (97, 16171), (102, 16207), (117, 16330),

Gene: RedMaple\_16 Start: 14009, Stop: 14623, Start Num: 8

Candidate Starts for RedMaple\_16:

(Start: 8 @14009 has 334 MA's), (Start: 10 @14018 has 1 MA's), (18, 14051), (42, 14153), (73, 14300), (84, 14381), (87, 14390), (96, 14435), (116, 14579), (120, 14615),

Gene: Remy19\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Remy19\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Renaissance\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Renaissance\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Reprobate\_18 Start: 15842, Stop: 16441, Start Num: 8

Candidate Starts for Reprobate\_18:

(Start: 8 @15842 has 334 MA's), (Start: 10 @15851 has 1 MA's), (21, 15893), (22, 15896), (26, 15911), (46, 16004), (53, 16034), (56, 16046), (57, 16049), (67, 16100), (73, 16133), (80, 16193), (102, 16310), (118, 16433),

Gene: Rich\_18 Start: 15741, Stop: 16340, Start Num: 8

Candidate Starts for Rich\_18:

(Start: 8 @15741 has 334 MA's), (15, 15771), (22, 15795), (26, 15810), (46, 15903), (50, 15921), (53, 15933), (56, 15945), (57, 15948), (73, 16032), (81, 16095), (102, 16209), (118, 16332),

Gene: Ricotta\_16 Start: 13721, Stop: 14335, Start Num: 8

Candidate Starts for Ricotta\_16:

(Start: 8 @13721 has 334 MA's), (Start: 10 @13730 has 1 MA's), (18, 13763), (42, 13865), (73, 14012), (87, 14102), (96, 14147), (116, 14291), (120, 14327),

Gene: Riggan\_17 Start: 13977, Stop: 14591, Start Num: 8

Candidate Starts for Riggan\_17:

(Start: 8 @13977 has 334 MA's), (Start: 10 @13986 has 1 MA's), (18, 14019), (42, 14121), (73, 14268), (84, 14349), (87, 14358), (96, 14403), (116, 14547), (120, 14583),

Gene: Rimu\_16 Start: 13709, Stop: 14323, Start Num: 8

Candidate Starts for Rimu\_16:

(Start: 8 @13709 has 334 MA's), (Start: 10 @13718 has 1 MA's), (18, 13751), (42, 13853), (73, 14000), (84, 14081), (87, 14090), (96, 14135), (120, 14315),

Gene: Rinkes\_21 Start: 17665, Stop: 18258, Start Num: 8

Candidate Starts for Rinkes\_21:

(Start: 8 @17665 has 334 MA's), (Start: 10 @17674 has 1 MA's), (11, 17677), (16, 17701), (26, 17734), (29, 17746), (42, 17809), (47, 17833), (53, 17857), (64, 17905), (66, 17911), (72, 17950), (91, 18061), (94, 18082), (96, 18091), (104, 18142), (116, 18229),

Gene: Rita130\_18 Start: 15608, Stop: 16198, Start Num: 10

Candidate Starts for Rita130\_18:

(Start: 8 @15599 has 334 MA's), (Start: 10 @15608 has 1 MA's), (15, 15629), (21, 15650), (22, 15653), (26, 15668), (50, 15779), (53, 15791), (56, 15803), (57, 15806), (81, 15953), (92, 15998), (96, 16025), (102, 16067), (116, 16169), (118, 16190),

Gene: Robyn\_16 Start: 13570, Stop: 14184, Start Num: 8

Candidate Starts for Robyn\_16:

(Start: 8 @13570 has 334 MA's), (Start: 10 @13579 has 1 MA's), (18, 13612), (42, 13714), (73, 13861), (84, 13942), (87, 13951), (96, 13996), (116, 14140), (120, 14176),

Gene: Roliet\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Roliet\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Roscoe\_18 Start: 14238, Stop: 14852, Start Num: 8

Candidate Starts for Roscoe\_18:

(Start: 8 @14238 has 334 MA's), (Start: 10 @14247 has 1 MA's), (18, 14280), (42, 14382), (73, 14529), (87, 14619), (96, 14664), (116, 14808), (120, 14844),

Gene: Roy17\_17 Start: 13699, Stop: 14313, Start Num: 8

Candidate Starts for Roy17\_17:

(Start: 8 @13699 has 334 MA's), (Start: 10 @13708 has 1 MA's), (18, 13741), (42, 13843), (73, 13990), (84, 14071), (87, 14080), (96, 14125), (120, 14305),

Gene: SDcharge11\_17 Start: 13978, Stop: 14592, Start Num: 8

Candidate Starts for SDcharge11\_17:

(Start: 8 @13978 has 334 MA's), (Start: 10 @13987 has 1 MA's), (18, 14020), (42, 14122), (73, 14269), (84, 14350), (87, 14359), (96, 14404), (116, 14548), (120, 14584),

Gene: Saguaro\_19 Start: 16734, Stop: 17336, Start Num: 8

Candidate Starts for Saguaro\_19:

(Start: 8 @16734 has 334 MA's), (Start: 10 @16743 has 1 MA's), (20, 16782), (21, 16785), (22, 16788), (36, 16845), (37, 16854), (46, 16896), (49, 16911), (53, 16926), (78, 17070), (87, 17115), (89, 17121), (102, 17205),

Gene: Samaymay\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Samaymay\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: SassyCat97\_16 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for SassyCat97\_16:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Schadenfreude\_16 Start: 13554, Stop: 14168, Start Num: 8

Candidate Starts for Schadenfreude\_16:

(Start: 8 @13554 has 334 MA's), (Start: 10 @13563 has 1 MA's), (18, 13596), (42, 13698), (73, 13845), (84, 13926), (87, 13935), (96, 13980), (116, 14124), (120, 14160),

Gene: Schiebel\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Schiebel\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Schueller\_16 Start: 13839, Stop: 14309, Start Num: 42

Candidate Starts for Schueller\_16:

(Start: 8 @13695 has 334 MA's), (Start: 10 @13704 has 1 MA's), (18, 13737), (42, 13839), (73, 13986), (87, 14076), (96, 14121), (120, 14301),

Gene: Scoot17C\_17 Start: 13998, Stop: 14612, Start Num: 8

Candidate Starts for Scoot17C\_17:

(Start: 8 @13998 has 334 MA's), (Start: 10 @14007 has 1 MA's), (18, 14040), (42, 14142), (73, 14289), (84, 14370), (87, 14379), (96, 14424), (120, 14604),

Gene: Scrick\_16 Start: 13717, Stop: 14331, Start Num: 8

Candidate Starts for Scrick\_16:

(Start: 8 @13717 has 334 MA's), (Start: 10 @13726 has 1 MA's), (18, 13759), (42, 13861), (73, 14008), (87, 14098), (96, 14143), (116, 14287), (120, 14323),

Gene: Selr12\_17 Start: 13722, Stop: 14336, Start Num: 8

Candidate Starts for Selr12\_17:

(Start: 8 @13722 has 334 MA's), (Start: 10 @13731 has 1 MA's), (18, 13764), (42, 13866), (73, 14013), (87, 14103), (96, 14148), (116, 14292), (120, 14328),

Gene: Serendipitous\_18 Start: 15788, Stop: 16387, Start Num: 8

Candidate Starts for Serendipitous\_18:

(Start: 8 @15788 has 334 MA's), (Start: 10 @15797 has 1 MA's), (21, 15839), (26, 15857), (46, 15950), (50, 15968), (53, 15980), (57, 15995), (67, 16046), (80, 16139), (102, 16256), (118, 16379),

Gene: Serendipity\_17 Start: 14018, Stop: 14632, Start Num: 8

Candidate Starts for Serendipity\_17:

(Start: 8 @14018 has 334 MA's), (Start: 10 @14027 has 1 MA's), (18, 14060), (42, 14162), (73, 14309), (84, 14390), (87, 14399), (96, 14444), (120, 14624),

Gene: Serpentine\_0017 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for Serpentine\_0017:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: ShaboiShabazz\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for ShaboiShabazz\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Sheila\_17 Start: 13989, Stop: 14603, Start Num: 8

Candidate Starts for Sheila\_17:

(Start: 8 @13989 has 334 MA's), (Start: 10 @13998 has 1 MA's), (18, 14031), (42, 14133), (73, 14280), (84, 14361), (87, 14370), (96, 14415), (116, 14559), (120, 14595),

Gene: Shenyu\_18 Start: 15565, Stop: 16164, Start Num: 8

Candidate Starts for Shenyu\_18:

(Start: 8 @15565 has 334 MA's), (Start: 10 @15574 has 1 MA's), (15, 15595), (26, 15634), (50, 15745), (53, 15757), (56, 15769), (57, 15772), (67, 15823), (80, 15916), (102, 16033), (118, 16156),

Gene: ShiVal\_17 Start: 13991, Stop: 14605, Start Num: 8

Candidate Starts for ShiVal\_17:

(Start: 8 @13991 has 334 MA's), (Start: 10 @14000 has 1 MA's), (18, 14033), (42, 14135), (73, 14282), (87, 14372), (96, 14417), (116, 14561), (120, 14597),

Gene: Sigman\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for Sigman\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (84, 14360), (87, 14369), (96, 14414), (120, 14594),

Gene: SilverBell\_17 Start: 14003, Stop: 14617, Start Num: 8

Candidate Starts for SilverBell\_17:

(Start: 8 @14003 has 334 MA's), (Start: 10 @14012 has 1 MA's), (18, 14045), (42, 14147), (73, 14294), (87, 14384), (96, 14429), (120, 14609),

Gene: Simielle\_16 Start: 13689, Stop: 14303, Start Num: 8

Candidate Starts for Simielle\_16:

(Start: 8 @13689 has 334 MA's), (Start: 10 @13698 has 1 MA's), (18, 13731), (42, 13833), (73, 13980), (87, 14070), (96, 14115), (116, 14259), (120, 14295),

Gene: SirJeffery\_18 Start: 15609, Stop: 16199, Start Num: 10

Candidate Starts for SirJeffery\_18:

(Start: 8 @15600 has 334 MA's), (Start: 10 @15609 has 1 MA's), (15, 15630), (21, 15651), (22, 15654), (26, 15669), (46, 15762), (49, 15777), (50, 15780), (53, 15792), (56, 15804), (57, 15807), (81, 15954), (89, 15987), (102, 16068), (116, 16170), (118, 16191),

Gene: Sizemore\_31 Start: 27108, Stop: 27725, Start Num: 9

Candidate Starts for Sizemore\_31:

(Start: 9 @27108 has 60 MA's), (21, 27156), (30, 27189), (33, 27198), (37, 27225), (40, 27249), (47, 27282), (49, 27291), (52, 27303), (55, 27312), (71, 27414), (74, 27429), (78, 27471), (92, 27534), (106, 27636),

Gene: Skippy\_17 Start: 13982, Stop: 14596, Start Num: 8

Candidate Starts for Skippy\_17:

(Start: 8 @13982 has 334 MA's), (Start: 10 @13991 has 1 MA's), (18, 14024), (42, 14126), (73, 14273), (87, 14363), (96, 14408), (116, 14552), (120, 14588),

Gene: Slatt\_17 Start: 14014, Stop: 14628, Start Num: 8

Candidate Starts for Slatt\_17:

(Start: 8 @14014 has 334 MA's), (Start: 10 @14023 has 1 MA's), (18, 14056), (42, 14158), (73, 14305), (84, 14386), (87, 14395), (96, 14440), (116, 14584), (120, 14620),

Gene: Sneeze\_31 Start: 27189, Stop: 27806, Start Num: 9



Candidate Starts for Sneeze\_31:

(Start: 9 @27189 has 60 MA's), (21, 27237), (30, 27270), (33, 27279), (40, 27330), (47, 27363), (49, 27372), (52, 27384), (55, 27393), (71, 27495), (74, 27510), (78, 27552), (92, 27615),

Gene: Soile\_17 Start: 13709, Stop: 14323, Start Num: 8

Candidate Starts for Soile\_17:

(Start: 8 @13709 has 334 MA's), (Start: 10 @13718 has 1 MA's), (18, 13751), (42, 13853), (73, 14000), (87, 14090), (96, 14135), (116, 14279), (120, 14315),

Gene: Solosis\_16 Start: 13716, Stop: 14330, Start Num: 8

Candidate Starts for Solosis\_16:

(Start: 8 @13716 has 334 MA's), (Start: 10 @13725 has 1 MA's), (18, 13758), (42, 13860), (73, 14007), (84, 14088), (87, 14097), (96, 14142), (120, 14322),

Gene: Sophia\_16 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Sophia\_16:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (120, 14310),

Gene: Soto\_17 Start: 13994, Stop: 14608, Start Num: 8

Candidate Starts for Soto\_17:

(Start: 8 @13994 has 334 MA's), (Start: 10 @14003 has 1 MA's), (18, 14036), (42, 14138), (73, 14285), (87, 14375), (96, 14420), (116, 14564), (120, 14600),

Gene: Spartan300\_17 Start: 13994, Stop: 14608, Start Num: 8

Candidate Starts for Spartan300\_17:

(Start: 8 @13994 has 334 MA's), (Start: 10 @14003 has 1 MA's), (18, 14036), (42, 14138), (73, 14285), (84, 14366), (87, 14375), (96, 14420), (116, 14564), (120, 14600),

Gene: Squid\_17 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Squid\_17:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Squiggle\_17 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Squiggle\_17:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (84, 14076), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Stargaze\_31 Start: 28894, Stop: 29514, Start Num: 8

Candidate Starts for Stargaze\_31:

(Start: 8 @28894 has 334 MA's), (Start: 9 @28897 has 60 MA's), (47, 29071), (51, 29089), (81, 29278), (102, 29392),

Gene: Stinger\_15 Start: 14241, Stop: 14852, Start Num: 8

Candidate Starts for Stinger\_15:

(Start: 8 @14241 has 334 MA's), (17, 14280), (22, 14295), (28, 14316), (32, 14331), (37, 14361), (46, 14403), (47, 14409), (50, 14421), (56, 14445), (67, 14499), (87, 14622), (102, 14709), (103, 14718), (116, 14811), (117, 14832),

Gene: StinkyVeggy\_20 Start: 15730, Stop: 16320, Start Num: 10

Candidate Starts for StinkyVeggy\_20:

(Start: 8 @15721 has 334 MA's), (Start: 10 @15730 has 1 MA's), (15, 15751), (26, 15790), (53, 15913), (56, 15925), (57, 15928), (102, 16189), (118, 16312),

Gene: Struggle\_16 Start: 13550, Stop: 14164, Start Num: 8

Candidate Starts for Struggle\_16:

(Start: 8 @13550 has 334 MA's), (Start: 10 @13559 has 1 MA's), (18, 13592), (42, 13694), (73, 13841), (87, 13931), (96, 13976), (116, 14120), (120, 14156),

Gene: Suffolk\_17 Start: 13996, Stop: 14610, Start Num: 8

Candidate Starts for Suffolk\_17:

(Start: 8 @13996 has 334 MA's), (Start: 10 @14005 has 1 MA's), (18, 14038), (42, 14140), (73, 14287), (87, 14377), (96, 14422), (116, 14566), (120, 14602),

Gene: Suigeneris\_18 Start: 15600, Stop: 16199, Start Num: 8

Candidate Starts for Suigeneris\_18:

(Start: 8 @15600 has 334 MA's), (Start: 10 @15609 has 1 MA's), (15, 15630), (21, 15651), (26, 15669), (28, 15675), (46, 15762), (50, 15780), (53, 15792), (56, 15804), (57, 15807), (82, 15957), (102, 16068), (116, 16170), (118, 16191),

Gene: Surely\_17 Start: 14006, Stop: 14620, Start Num: 8

Candidate Starts for Surely\_17:

(Start: 8 @14006 has 334 MA's), (Start: 10 @14015 has 1 MA's), (18, 14048), (42, 14150), (73, 14297), (84, 14378), (87, 14387), (96, 14432), (116, 14576), (120, 14612),

Gene: Sweets\_31 Start: 27102, Stop: 27719, Start Num: 9

Candidate Starts for Sweets\_31:

(Start: 9 @27102 has 60 MA's), (21, 27150), (30, 27183), (33, 27192), (37, 27219), (40, 27243), (47, 27276), (49, 27285), (52, 27297), (55, 27306), (71, 27408), (74, 27423), (78, 27465), (92, 27528), (106, 27630),

Gene: Swiphy\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Swiphy\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (84, 14369), (87, 14378), (96, 14423), (120, 14603),

Gene: Swish\_17 Start: 13992, Stop: 14606, Start Num: 8

Candidate Starts for Swish\_17:

(Start: 8 @13992 has 334 MA's), (Start: 10 @14001 has 1 MA's), (18, 14034), (42, 14136), (73, 14283), (87, 14373), (96, 14418), (116, 14562), (120, 14598),

Gene: Taheera\_31 Start: 27231, Stop: 27848, Start Num: 9

Candidate Starts for Taheera\_31:

(Start: 9 @27231 has 60 MA's), (17, 27267), (30, 27312), (33, 27321), (47, 27405), (52, 27426), (55, 27435), (71, 27537), (74, 27552), (78, 27594), (91, 27654), (92, 27657),

Gene: TallGrassMM\_17 Start: 13722, Stop: 14336, Start Num: 8

Candidate Starts for TallGrassMM\_17:

(Start: 8 @13722 has 334 MA's), (Start: 10 @13731 has 1 MA's), (18, 13764), (42, 13866), (73, 14013), (87, 14103), (96, 14148), (116, 14292), (120, 14328),

Gene: Telesworld\_16 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for Telesworld\_16:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (87, 14085), (96, 14130), (116, 14274), (120, 14310),

Gene: Terror\_31 Start: 27231, Stop: 27848, Start Num: 9

Candidate Starts for Terror\_31:

(Start: 9 @27231 has 60 MA's), (17, 27267), (30, 27312), (33, 27321), (47, 27405), (52, 27426), (55, 27435), (71, 27537), (74, 27552), (78, 27594), (91, 27654), (92, 27657),

Gene: Thonko\_18 Start: 13537, Stop: 14112, Start Num: 7

Candidate Starts for Thonko\_18:

(Start: 7 @13537 has 1 MA's), (Start: 8 @13540 has 334 MA's), (Start: 10 @13549 has 1 MA's), (12, 13558), (21, 13591), (26, 13609), (53, 13708), (58, 13726), (67, 13774), (84, 13888), (98, 13957), (99, 13963),

Gene: Thora\_17 Start: 14006, Stop: 14620, Start Num: 8

Candidate Starts for Thora\_17:

(Start: 8 @14006 has 334 MA's), (Start: 10 @14015 has 1 MA's), (18, 14048), (42, 14150), (73, 14297), (87, 14387), (96, 14432), (116, 14576), (120, 14612),

Gene: ThreeOh3D2\_17 Start: 14007, Stop: 14621, Start Num: 8

Candidate Starts for ThreeOh3D2\_17:

(Start: 8 @14007 has 334 MA's), (Start: 10 @14016 has 1 MA's), (18, 14049), (42, 14151), (73, 14298), (84, 14379), (87, 14388), (96, 14433), (116, 14577), (120, 14613),

Gene: Thunderbird\_16 Start: 13706, Stop: 14320, Start Num: 8

Candidate Starts for Thunderbird\_16:

(Start: 8 @13706 has 334 MA's), (Start: 10 @13715 has 1 MA's), (18, 13748), (42, 13850), (73, 13997), (84, 14078), (87, 14087), (96, 14132), (116, 14276), (120, 14312),

Gene: Timmi\_16 Start: 13716, Stop: 14330, Start Num: 8

Candidate Starts for Timmi\_16:

(Start: 8 @13716 has 334 MA's), (Start: 10 @13725 has 1 MA's), (18, 13758), (42, 13860), (73, 14007), (84, 14088), (87, 14097), (96, 14142), (120, 14322),

Gene: TinaBug\_31 Start: 27102, Stop: 27719, Start Num: 9

Candidate Starts for TinaBug\_31:

(Start: 9 @27102 has 60 MA's), (21, 27150), (30, 27183), (33, 27192), (37, 27219), (40, 27243), (47, 27276), (49, 27285), (52, 27297), (55, 27306), (71, 27408), (74, 27423), (78, 27465), (92, 27528), (106, 27630),

Gene: TomBombadil\_17 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for TomBombadil\_17:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (87, 14381), (96, 14426), (116, 14570), (120, 14606),

Gene: TomBrady\_31 Start: 27108, Stop: 27725, Start Num: 9

Candidate Starts for TomBrady\_31:

(Start: 9 @27108 has 60 MA's), (21, 27156), (30, 27189), (33, 27198), (37, 27225), (40, 27249), (47, 27282), (49, 27291), (52, 27303), (55, 27312), (71, 27414), (74, 27429), (78, 27471), (92, 27534), (106, 27636),

Gene: Tomlarah\_17 Start: 13991, Stop: 14605, Start Num: 8

Candidate Starts for Tomlarah\_17:

(Start: 8 @13991 has 334 MA's), (Start: 10 @14000 has 1 MA's), (18, 14033), (42, 14135), (73, 14282), (87, 14372), (96, 14417), (116, 14561), (120, 14597),

Gene: Toni\_16 Start: 13702, Stop: 14316, Start Num: 8

Candidate Starts for Toni\_16:

(Start: 8 @13702 has 334 MA's), (Start: 10 @13711 has 1 MA's), (18, 13744), (42, 13846), (73, 13993), (84, 14074), (87, 14083), (96, 14128), (116, 14272), (120, 14308),

Gene: Tooj\_17 Start: 14004, Stop: 14618, Start Num: 8

Candidate Starts for Tooj\_17:

(Start: 8 @14004 has 334 MA's), (Start: 10 @14013 has 1 MA's), (18, 14046), (42, 14148), (73, 14295), (84, 14376), (87, 14385), (96, 14430), (116, 14574), (120, 14610),

Gene: True\_16 Start: 13705, Stop: 14319, Start Num: 8

Candidate Starts for True\_16:

(Start: 8 @13705 has 334 MA's), (Start: 10 @13714 has 1 MA's), (18, 13747), (42, 13849), (73, 13996), (87, 14086), (96, 14131), (116, 14275), (120, 14311),

Gene: Trypo\_17 Start: 13994, Stop: 14608, Start Num: 8

Candidate Starts for Trypo\_17:

(Start: 8 @13994 has 334 MA's), (Start: 10 @14003 has 1 MA's), (18, 14036), (42, 14138), (73, 14285), (84, 14366), (87, 14375), (96, 14420), (120, 14600),

Gene: TyrionL\_16 Start: 13556, Stop: 14170, Start Num: 8

Candidate Starts for TyrionL\_16:

(Start: 8 @13556 has 334 MA's), (Start: 10 @13565 has 1 MA's), (18, 13598), (42, 13700), (73, 13847), (87, 13937), (96, 13982), (116, 14126), (120, 14162),

Gene: UAch1\_17 Start: 14015, Stop: 14629, Start Num: 8

Candidate Starts for UAch1\_17:

(Start: 8 @14015 has 334 MA's), (Start: 10 @14024 has 1 MA's), (18, 14057), (42, 14159), (73, 14306), (87, 14396), (96, 14441), (116, 14585), (120, 14621),

Gene: Ubuntu\_36 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Ubuntu\_36:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: UncleHowie\_17 Start: 13704, Stop: 14318, Start Num: 8

Candidate Starts for UncleHowie\_17:

(Start: 8 @13704 has 334 MA's), (Start: 10 @13713 has 1 MA's), (18, 13746), (42, 13848), (73, 13995), (84, 14076), (87, 14085), (96, 14130), (120, 14310),

Gene: Usavi\_17 Start: 14006, Stop: 14620, Start Num: 8

Candidate Starts for Usavi\_17:

(Start: 8 @14006 has 334 MA's), (Start: 10 @14015 has 1 MA's), (18, 14048), (42, 14150), (73, 14297), (84, 14378), (87, 14387), (96, 14432), (116, 14576), (120, 14612),

Gene: Vaishali24\_16 Start: 13657, Stop: 14271, Start Num: 8

Candidate Starts for Vaishali24\_16:

(Start: 8 @13657 has 334 MA's), (Start: 10 @13666 has 1 MA's), (18, 13699), (42, 13801), (73, 13948), (87, 14038), (96, 14083), (116, 14227), (120, 14263),

Gene: Valjean\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Valjean\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (84, 14369), (87, 14378), (96, 14423), (116, 14567), (120, 14603),

Gene: Vaticameos\_17 Start: 13695, Stop: 14309, Start Num: 8

Candidate Starts for Vaticameos\_17:

(Start: 8 @13695 has 334 MA's), (Start: 10 @13704 has 1 MA's), (18, 13737), (42, 13839), (73, 13986), (87, 14076), (96, 14121), (116, 14265), (120, 14301),

Gene: Veritas\_16 Start: 13544, Stop: 14158, Start Num: 8

Candidate Starts for Veritas\_16:

(Start: 8 @13544 has 334 MA's), (Start: 10 @13553 has 1 MA's), (18, 13586), (42, 13688), (73, 13835), (87, 13925), (96, 13970), (116, 14114), (120, 14150),

Gene: Vincenzo\_18 Start: 16515, Stop: 17126, Start Num: 8

Candidate Starts for Vincenzo\_18:

(Start: 8 @16515 has 334 MA's), (21, 16566), (23, 16575), (32, 16605), (42, 16659), (50, 16695), (56, 16719), (67, 16773), (97, 16947), (102, 16983), (103, 16992),

Gene: VioletZ\_17 Start: 15775, Stop: 16386, Start Num: 8

Candidate Starts for VioletZ\_17:

(Start: 8 @15775 has 334 MA's), (17, 15814), (22, 15829), (28, 15850), (32, 15865), (42, 15919), (46, 15937), (50, 15955), (56, 15979), (67, 16033), (87, 16156), (92, 16174), (97, 16207), (102, 16243), (117, 16366),

Gene: Virapocalypse\_17 Start: 13989, Stop: 14603, Start Num: 8

Candidate Starts for Virapocalypse\_17:

(Start: 8 @13989 has 334 MA's), (Start: 10 @13998 has 1 MA's), (18, 14031), (42, 14133), (73, 14280), (87, 14370), (96, 14415), (116, 14559), (120, 14595),

Gene: Virgeve\_16 Start: 13710, Stop: 14324, Start Num: 8

Candidate Starts for Virgeve\_16:

(Start: 8 @13710 has 334 MA's), (Start: 10 @13719 has 1 MA's), (18, 13752), (42, 13854), (73, 14001), (87, 14091), (96, 14136), (116, 14280), (120, 14316),

Gene: Vista\_17 Start: 14000, Stop: 14614, Start Num: 8

Candidate Starts for Vista\_17:

(Start: 8 @14000 has 334 MA's), (Start: 10 @14009 has 1 MA's), (18, 14042), (42, 14144), (73, 14291), (84, 14372), (87, 14381), (96, 14426), (120, 14606),

Gene: Vivaldi\_17 Start: 14031, Stop: 14645, Start Num: 8

Candidate Starts for Vivaldi\_17:

(Start: 8 @14031 has 334 MA's), (Start: 10 @14040 has 1 MA's), (18, 14073), (42, 14175), (73, 14322), (87, 14412), (96, 14457), (116, 14601), (120, 14637),

Gene: Vortex\_17 Start: 13711, Stop: 14325, Start Num: 8

Candidate Starts for Vortex\_17:

(Start: 8 @13711 has 334 MA's), (Start: 10 @13720 has 1 MA's), (18, 13753), (42, 13855), (73, 14002), (84, 14083), (87, 14092), (96, 14137), (120, 14317),

Gene: Waleliano\_17 Start: 15745, Stop: 16356, Start Num: 8

Candidate Starts for Waleliano\_17:

(Start: 8 @15745 has 334 MA's), (17, 15784), (22, 15799), (28, 15820), (32, 15835), (42, 15889), (46, 15907), (50, 15925), (56, 15949), (67, 16003), (87, 16126), (97, 16177), (102, 16213), (117, 16336),

Gene: Wallhey\_16 Start: 13562, Stop: 14176, Start Num: 8

Candidate Starts for Wallhey\_16:

(Start: 8 @13562 has 334 MA's), (Start: 10 @13571 has 1 MA's), (18, 13604), (42, 13706), (73, 13853), (84, 13934), (87, 13943), (96, 13988), (120, 14168),

Gene: Waterdiva\_17 Start: 13998, Stop: 14612, Start Num: 8

Candidate Starts for Waterdiva\_17:

(Start: 8 @13998 has 334 MA's), (Start: 10 @14007 has 1 MA's), (18, 14040), (42, 14142), (73, 14289), (84, 14370), (87, 14379), (96, 14424), (120, 14604),

Gene: Webster2\_36 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Webster2\_36:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: Weher20\_17 Start: 13988, Stop: 14602, Start Num: 8

Candidate Starts for Weher20\_17:

(Start: 8 @13988 has 334 MA's), (Start: 10 @13997 has 1 MA's), (18, 14030), (42, 14132), (73, 14279), (87, 14369), (96, 14414), (120, 14594),

Gene: Weirido19\_32 Start: 28516, Stop: 29082, Start Num: 39

Candidate Starts for Weirido19\_32:

(1, 28015), (2, 28198), (3, 28249), (39, 28516), (41, 28528), (45, 28546), (48, 28564), (61, 28636), (62, 28675), (65, 28681), (68, 28705), (70, 28723), (81, 28834), (87, 28861), (106, 28981),

Gene: Wendigo\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Wendigo\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Windsor\_16 Start: 13664, Stop: 14278, Start Num: 8

Candidate Starts for Windsor\_16:

(Start: 8 @13664 has 334 MA's), (Start: 10 @13673 has 1 MA's), (18, 13706), (42, 13808), (73, 13955), (87, 14045), (96, 14090), (116, 14234), (120, 14270),

Gene: Wishmaker\_35 Start: 30329, Stop: 30949, Start Num: 8

Candidate Starts for Wishmaker\_35:

(5, 30278), (Start: 8 @30329 has 334 MA's), (20, 30377), (35, 30431), (37, 30449), (49, 30515), (66, 30605), (71, 30638), (81, 30713), (84, 30731), (91, 30755), (94, 30776), (96, 30785), (101, 30821), (102, 30827), (113, 30905),

Gene: Xavier\_16 Start: 13716, Stop: 14330, Start Num: 8

Candidate Starts for Xavier\_16:

(Start: 8 @13716 has 334 MA's), (Start: 10 @13725 has 1 MA's), (18, 13758), (42, 13860), (73, 14007), (87, 14097), (96, 14142), (116, 14286), (120, 14322),

Gene: Xincheng\_17 Start: 15566, Stop: 16177, Start Num: 8

Candidate Starts for Xincheng\_17:

(Start: 8 @15566 has 334 MA's), (17, 15605), (22, 15620), (28, 15641), (32, 15656), (42, 15710), (46, 15728), (56, 15770), (67, 15824), (87, 15947), (97, 15998), (102, 16034),

Gene: Yoshand\_17 Start: 14001, Stop: 14615, Start Num: 8

Candidate Starts for Yoshand\_17:

(Start: 8 @14001 has 334 MA's), (Start: 10 @14010 has 1 MA's), (18, 14043), (42, 14145), (73, 14292), (87, 14382), (96, 14427), (116, 14571), (120, 14607),

Gene: YouGoGlencoco\_17 Start: 13994, Stop: 14608, Start Num: 8

Candidate Starts for YouGoGlencoco\_17:

(Start: 8 @13994 has 334 MA's), (Start: 10 @14003 has 1 MA's), (18, 14036), (42, 14138), (73, 14285), (87, 14375), (96, 14420), (116, 14564), (120, 14600),

Gene: Zaider\_18 Start: 14227, Stop: 14841, Start Num: 8

Candidate Starts for Zaider\_18:

(Start: 8 @14227 has 334 MA's), (Start: 10 @14236 has 1 MA's), (18, 14269), (42, 14371), (73, 14518), (84, 14599), (87, 14608), (96, 14653), (120, 14833),

Gene: Zelda\_17 Start: 13997, Stop: 14611, Start Num: 8

Candidate Starts for Zelda\_17:

(Start: 8 @13997 has 334 MA's), (Start: 10 @14006 has 1 MA's), (18, 14039), (42, 14141), (73, 14288), (87, 14378), (96, 14423), (120, 14603),

Gene: Zemanar\_18 Start: 15745, Stop: 16356, Start Num: 8

Candidate Starts for Zemanar\_18:

(Start: 8 @15745 has 334 MA's), (17, 15784), (22, 15799), (28, 15820), (32, 15835), (42, 15889), (46, 15907), (50, 15925), (56, 15949), (67, 16003), (87, 16126), (97, 16177), (102, 16213), (117, 16336),

Gene: ZoMa\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for ZoMa\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Zombie\_31 Start: 27107, Stop: 27724, Start Num: 9

Candidate Starts for Zombie\_31:

(Start: 9 @27107 has 60 MA's), (21, 27155), (30, 27188), (33, 27197), (37, 27224), (40, 27248), (47, 27281), (49, 27290), (52, 27302), (55, 27311), (71, 27413), (74, 27428), (78, 27470), (92, 27533), (106, 27635),

Gene: Zonia\_17 Start: 14011, Stop: 14625, Start Num: 8

Candidate Starts for Zonia\_17:

(Start: 8 @14011 has 334 MA's), (Start: 10 @14020 has 1 MA's), (18, 14053), (42, 14155), (73, 14302), (87, 14392), (96, 14437), (116, 14581), (120, 14617),