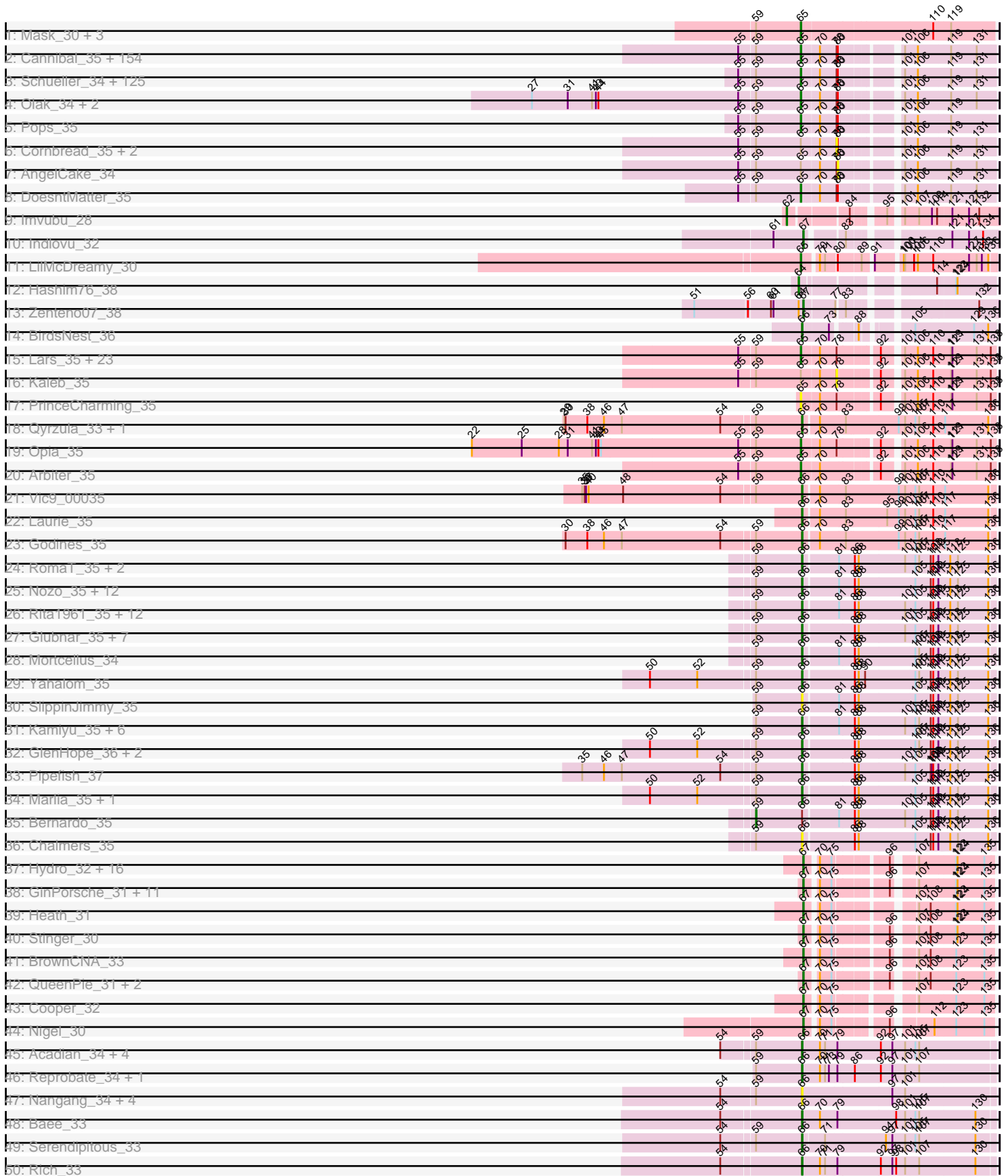


Pham 222766





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 222766 Report

This analysis was run 03/28/25 on database version 593.

Pham number 222766 has 474 members, 64 are drafts.

Phages represented in each track:

- Track 1 : Mask\_30, Dori\_31, Mao1\_29, Sejanus\_30
- Track 2 : Cannibal\_35, Gophee\_35, Mana\_34, Kwksand96\_34, Murdoc\_35, Podrick\_35, Riggan\_35, Durga\_35, Puhltonio\_35, MelsMeow\_34, Lasso\_35, LostAndPhound\_34, Sheila\_35, Mecca\_34, Samaymay\_35, Ashraf\_34, Khan1\_35, Scrick\_35, Haleema\_34, Timmi\_34, Andre\_35, TomBombadil\_35, Bishoperium\_34, Craff\_35, Phipps\_35, Lulwa\_35, Potter\_34, Emiris\_35, PhrodoBaggins\_34, Kwadwo\_34, Cobra\_35, Megatron\_35, Dingo\_35, LeeLot\_35, Vaticameos\_35, ElvisPhasley\_35, Eugenia\_35, Bluephacebaby\_34, Pacifista\_34, Roliet\_35, Harvey\_35, Anderson\_35, Charles1\_35, GeneCoco\_35, Chah\_36, Telesworld\_34, QueenBeane\_35, Fozzie\_34, Banjo\_34, Matalotodo\_35, Held\_35, Lego3393\_35, Lumine\_34, Oosterbaan\_35, Longacauda\_34, Chunky\_35, Phareon\_35, KingVeVeVe\_35, SilverBell\_35, LeiMonet\_35, Inverness\_35, Gyarad\_0035, Zelda\_35, LemonSlice\_35, Magic8\_35, Legolas\_34, Nathan\_36, LuckyMarjie\_34, Thora\_35, MRabcd\_34, HighStump\_34, Basato\_36, Frankicide\_35, Apizium\_34, Dice\_34, Zaider\_36, Cher\_34, Altwerkus\_34, Beaglebox\_34, Hocus\_34, OSmaximus\_35, Dione\_34, Brilliant\_35, Skippy\_35, Plata\_35, Gwilliam\_35, CamL\_35, Etaye\_35, Squiggle\_35, Plmatters\_35, True\_34, Megamind20\_35, Newman\_35, Trypo\_35, Soto\_35, Simielle\_34, Piglet\_0034, Morty\_35, Phunky\_35, Weher20\_35, Fringe\_35, Numberten\_35, BlueHusk\_35, Hamish\_35, Pinkman\_34, TooFast2Furius\_36, Vista\_35, OliverWalter\_35, Mesmerelda\_35, ImtiyazSitla\_34, Toni\_34, Mutante\_34, Melc17\_35, Orfeu\_34, CheetO\_35, Labeouficaum\_34, Nacho\_0035, CharlieGBrown\_34, DelRivs\_34, Serpentine\_0035, Gwennie1\_35, Haimas\_35, KlimbOn\_35, MitKao\_35, Mikota\_35, Xavier\_34, Nicole21\_35, Slatt\_35, Mosaic\_34, Jesabah\_35, Virapocalypse\_35, Maru\_34, Burr\_34, Inchworm\_35, UncleHowie\_35, Dati\_35, Childish\_34, Iridoclysis\_35, MiniBoss\_35, Soile\_35, Mulan\_34, Oline\_34, Maskar\_34, Orwigg\_34, JangoPhett\_35, Iridessa\_35, DirtJuice\_35, Derpp\_34, TyrionL\_34, Zonia\_35, Pipsqueak\_35, SDcharge11\_35, Gareth\_34, Wallhey\_34, Chipette\_36
- Track 3 : Schueller\_34, Kailash\_35, KingTut\_26, Manad\_34, Morgushi\_35, Freya\_34, Chute\_34, Scoot17C\_35, Sigman\_35, BlackStallion\_35, Mesh1\_35, UAch1\_35, Schadenfreude\_34, Lulumae\_34, AltPhacts\_35, Orion\_35, Coletti\_34, FriarPreacher\_35, JDog\_34, Robyn\_34, PinheadLarry\_35, Lopsy\_34, CampRoach\_35, Tooj\_35, ProfessorX\_35, Chaelin\_35, Tomlarah\_35, SassyCat97\_34, Vortex\_35, RedMaple\_34, Omniscient\_35, Jiminy\_34, SirBeauregard\_35, Kloppinator\_35, Badfish\_35, Adriana\_35, Kimbrough\_35, Giraffe\_35, Mag7\_34, Nyala\_34, Colbert\_35, Caspiboi\_36, Kahve\_34, Usavi\_35, YouGoGlencoco\_35, Cosmolli16\_34, DonSanchon\_34, Mcshane\_34, HSavage\_35,

Phergie\_34, Eremos\_35, Daka\_35, LasagnaCat\_35, Carthage\_33, JacAttac\_35, EmpTee\_35, ShiVal\_35, Veritas\_34, Swiphy\_36, Katniss\_35, Doddsville\_35, Antonia\_34, HenryJackson\_34, PhatCats2014\_35, Hartsy\_35, JakeO\_34, Squid\_35, Daffy\_35, Roscoe\_36, PG1\_35, Struggle\_34, Phamished\_35, Cornobble\_34, ABU\_35, FugateOSU\_34, Vaishali24\_34, Windsor\_34, FluffyNinja\_35, Keitherie\_35, Hertubise\_35, Virgeve\_34, PhatLouie\_35, Swish\_35, Vivaldi\_35, PhrankReynolds\_34, Waterdiva\_35, Serendipity\_35, Aelin\_34, Phleuron\_34, Roy17\_35, Jiraiya\_34, TallGrassMM\_35, Placalicious\_34, IsaacEli\_35, Spartan300\_35, Suffolk\_35, PhenghisKhan\_34, Jillium\_34, Grand2040\_34, Surely\_35, Chorkpop\_35, Hetaeria\_35, DuchessDung\_33, ThreeOh3D2\_35, Solosis\_34, Crownjwl\_35, Kikipoo\_35, Valjean\_35, Yoshand\_35, DaddyDaniels\_35, BatteryCK\_34, Olive\_35, Prickles\_35, Sophia\_34, Riverton\_34, Horchata\_35, Pherdinand\_35, Thunderbird\_34, Boehler\_35, KLucky39\_35, AbsoluteMadLad\_34, Fang\_35, Buckeye\_35, Quisquilliae\_35, Duggie\_34, MichaelPhcott\_34

- Track 4 : Olak\_34, Selr12\_35, Ricotta\_34
- Track 5 : Pops\_35
- Track 6 : Cornbread\_35, Rimu\_36, MrPhizzler\_34
- Track 7 : AngelCake\_34
- Track 8 : DoesntMatter\_35
- Track 9 : Imvubu\_28
- Track 10 : Indlovu\_32
- Track 11 : LilMcDreamy\_30
- Track 12 : Hashim76\_38
- Track 13 : Zenteno07\_38
- Track 14 : BirdsNest\_36
- Track 15 : Lars\_35, Rosebush\_35, Coffee\_35, Kolhan\_35, Glass\_35, LilSmirk\_35, Allegro\_35, Sabella\_35, MasterPo\_35, Boyle\_35, Kheth\_35, Holeinone\_35, Hedgerow\_35, Blocker23\_35, West99\_35, ItsyBitsy1\_35, Lephleur\_35, FrenchFry\_35, Calamitous\_35, Rhinoforte\_35, Eaglehorse\_35, Tinciduntolum\_36, Tres\_35, Brownie5\_35
- Track 16 : Kaleb\_35
- Track 17 : PrinceCharming\_35
- Track 18 : Qyrzula\_33, Ares\_35
- Track 19 : Opia\_35
- Track 20 : Arbiter\_35
- Track 21 : Vic9\_00035
- Track 22 : Laurie\_35
- Track 23 : Godines\_35
- Track 24 : RomaT\_35, Akoma\_35, Daisy\_35
- Track 25 : Nozo\_35, ChaChing\_35, Athena\_36, Morty007\_35, Heathcliff\_35, Marley1013\_35, OrangeOswald\_35, Deenasa\_35, Audrey\_35, Chentzyk\_34, Neos5\_35, Baloo\_35, Corofin\_35
- Track 26 : Rita1961\_35, Tydolla\_35, Devonte\_35, TinyTerror\_35, Chandler\_35, Abinghost\_35, Obutu\_35, MmasiCarm\_35, Shenandoah\_35, RagingRooster\_35, SynergyX\_35, SwainyDoc\_35, Philly\_34
- Track 27 : Glubnar\_35, Phayeta\_36, Gervas\_35, Olivio\_34, LestyG\_35, Casbah\_34, Ben11\_34, Kronus\_34
- Track 28 : Mortcellus\_34
- Track 29 : Yahalom\_35
- Track 30 : SlippinJimmy\_35
- Track 31 : Kamiyu\_35, Phlyer\_35, Gadget\_36, Yinz\_35, Phaedrus\_33, Briakila\_36, HarveySr\_35
- Track 32 : GlenHope\_36, Jackstina\_32, Compostia\_36

- Track 33 : Pipefish\_37
- Track 34 : Marlia\_35, Halfpint\_34
- Track 35 : Bernardo\_35
- Track 36 : Chalmers\_35
- Track 37 : Hydro\_32, JaguarMi\_32, Mithril\_32, Lolalove\_32, Fanaw\_31, Waleliano\_32, Hangman\_32, BobbyK\_32, Austelle\_33, RawrgerThat\_32, Xincheng\_31, Zemanar\_33, VioletZ\_32, Fortunato\_32, Apex\_32, Frederick\_32, Mudslide\_32
- Track 38 : GinPorsche\_31, Lambano\_31, JAMaL\_32, Prince\_32, ChrisnMich\_31, Ahwei\_31, Nanao\_31, Hally898\_31, Magpie\_31, Antihero\_31, Epah\_31, Poster\_31
- Track 39 : Heath\_31
- Track 40 : Stinger\_30
- Track 41 : BrownCNA\_33
- Track 42 : QueenPie\_31, AlanGrant\_33, Vincenzo\_33
- Track 43 : Cooper\_32
- Track 44 : Nigel\_30
- Track 45 : Acadian\_34, Rita130\_34, EastView9101\_33, Donny\_34, SirJeffery\_34
- Track 46 : Reprobate\_34, Phelemich\_34
- Track 47 : Nangang\_34, StinkyVeggy\_36, DigitDog\_34, KarasumaRum\_36, Shenyu\_34
- Track 48 : Bae\_33
- Track 49 : Serendipitous\_33
- Track 50 : Rich\_33
- Track 51 : Nehemiah\_33, Mysterious\_35
- Track 52 : Suigeneris\_34
- Track 53 : KayaCho\_29, Jolie1\_029
- Track 54 : 40BC\_029, Hosp\_027, 39HC\_029
- Track 55 : ForDig\_30
- Track 56 : Saguaro\_35
- Track 57 : Thonko\_33
- Track 58 : Knocker\_36
- Track 59 : Rinkes\_36
- Track 60 : CRB2\_37
- Track 61 : Funsized\_37
- Track 62 : PenguinLover67\_36
- Track 63 : Quesadilla\_36
- Track 64 : Pace1224\_25, FlagStaff\_25
- Track 65 : Pinnie\_26
- Track 66 : MOOREtheMARYer\_26
- Track 67 : GodPhather\_28, Bananafish\_35, LizLemon\_35, TA17A\_36, Phantasmagoria\_35, Jeon\_27, Faze9\_35
- Track 68 : Argie\_28
- Track 69 : PR\_27, D12\_27
- Track 70 : Megabear\_27, Cepens\_27
- Track 71 : Taptic\_27

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

The start number called the most often in the published annotations is 65, it was called in 306 of the 410 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 39HC\_029, 40BC\_029, ABU\_35, AbsoluteMadLad\_34, Adriana\_35, Aelin\_34, Allegro\_35, AltPhacts\_35, Altwerkus\_34, Anderson\_35, Andre\_35, Antonia\_34, Apizium\_34, Arbiter\_35, Ashraf\_34, Badfish\_35, Bananafish\_35, Banjo\_34, Basato\_36, BatteryCK\_34, Beaglebox\_34, Bishoperium\_34, BlackStallion\_35, Blocker23\_35, BlueHusk\_35, Bluephacebaby\_34, Boehler\_35, Boyle\_35, Brilliant\_35, Brownie5\_35, Buckeye\_35, Burr\_34, Calamitous\_35, CamL\_35, CampRoach\_35, Cannibal\_35, Carthage\_33, Caspiboi\_36, Chaelin\_35, Chah\_36, Charles1\_35, CharlieGBrown\_34, CheetO\_35, Cher\_34, Childish\_34, Chipette\_36, Chorkpop\_35, Chunky\_35, Chute\_34, Cobra\_35, Coffee\_35, Colbert\_35, Coletti\_34, Cornobble\_34, Cosmolli16\_34, Craff\_35, Crownjwl\_35, DaddyDaniels\_35, Daffy\_35, Daka\_35, Dati\_35, DelRivs\_34, Derpp\_34, Dice\_34, Dingo\_35, Dione\_34, DirtJuice\_35, Doddsville\_35, DoesntMatter\_35, DonSanchon\_34, Dori\_31, DuchessDung\_33, Duggie\_34, Durga\_35, Eaglehorse\_35, ElvisPhasley\_35, Emiris\_35, EmpTee\_35, Eremos\_35, Etaye\_35, Eugenia\_35, Fang\_35, Faze9\_35, FluffyNinja\_35, ForDig\_30, Fozzie\_34, Frankicide\_35, FrenchFry\_35, Freya\_34, FriarPreacher\_35, Fringe\_35, FugateOSU\_34, Funsized\_37, Gareth\_34, GeneCoco\_35, Giraffe\_35, Glass\_35, GodPhather\_28, Gophee\_35, Grand2040\_34, Gwennie1\_35, Gwilliam\_35, Gyarad\_0035, HSavage\_35, Haimas\_35, Haleema\_34, Hamish\_35, Hartsy\_35, Harvey\_35, Hedgerow\_35, Held\_35, HenryJackson\_34, Hertubise\_35, Hetaeria\_35, HighStump\_34, Hocus\_34, Holeinone\_35, Horchata\_35, Hosp\_027, ImtiyazSitla\_34, Inchworm\_35, Inverness\_35, Iridessa\_35, Iridoclysis\_35, IsaacEli\_35, ItsyBitsy1\_35, JDog\_34, JacAttac\_35, JakeO\_34, JangoPhett\_35, Jeon\_27, Jesabah\_35, Jillium\_34, Jiminy\_34, Jiraiya\_34, Jolie1\_029, KLucky39\_35, Kahve\_34, Kailash\_35, Katniss\_35, KayaCho\_29, Keitherie\_35, Khan1\_35, Kheth\_35, Kikipoo\_35, Kimbrough\_35, KingTut\_26, KingVeVeVe\_35, KlimbOn\_35, Kloppinator\_35, Kolhan\_35, Kwadwo\_34, Kwksand96\_34, Labeouficaum\_34, Lars\_35, LasagnaCat\_35, Lasso\_35, LeeLot\_35, Lego3393\_35, Legolas\_34, LeiMonet\_35, LemonSlice\_35, Lephleur\_35, LilMcDreamy\_30, LilSmirk\_35, LizLemon\_35, Longacauda\_34, Lopsy\_34, LostAndPhound\_34, LuckyMarjie\_34, Lulumae\_34, Lulwa\_35, Lumine\_34, MRabcd\_34, Mag7\_34, Magic8\_35, Mana\_34, Manad\_34, Mao1\_29, Maru\_34, Mask\_30, Maskar\_34, MasterPo\_35, Matalotodo\_35, Mcshane\_34, Mecca\_34, Megamind20\_35, Megatron\_35, Melc17\_35, MelsMeow\_34, Mesh1\_35, Mesmerelda\_35, MichaelPhcott\_34, Mikota\_35, MiniBoss\_35, MitKao\_35, Morgushi\_35, Morty\_35, Mosaic\_34, Mulan\_34, Murdoc\_35, Mutante\_34, Nacho\_0035, Nathan\_36, Newman\_35, Nicole21\_35, Numberten\_35, Nyala\_34, OSmaximus\_35, Olak\_34, Oline\_34, Olive\_35, OliverWalter\_35, Omniscient\_35, Oosterbaan\_35, Opia\_35, Orfeu\_34, Orion\_35, Orwigg\_34, PG1\_35, Pacifista\_34, Phamished\_35, Phantasmagoria\_35, Phareon\_35, PhatCats2014\_35, PhatLouie\_35, PhenghisKhan\_34, Pherdinand\_35, Phergie\_34, Phipps\_35, Phleuron\_34, PhrankReynolds\_34, PhrodoBaggins\_34, Phunky\_35, Piglet\_0034, PinheadLarry\_35, Pinkman\_34, Pipsqueak\_35, Placalicious\_34, Plata\_35, Plmatters\_35, Podrick\_35, Pops\_35, Potter\_34, Prickles\_35, PrinceCharming\_35, ProfessorX\_35, Puhltonio\_35, QueenBeane\_35, Quisquillae\_35, RedMaple\_34, Rhinoforte\_35, Ricotta\_34, Riggan\_35, Rinkes\_36, Riverton\_34, Robyn\_34, Roliet\_35, Roscoe\_36, Rosebush\_35, Roy17\_35, SDcharge11\_35, Sabella\_35, Samaymay\_35, SassyCat97\_34, Schadenfreude\_34, Schueller\_34, Scoot17C\_35, Scrick\_35, Sejanus\_30, Selr12\_35, Serendipity\_35, Serpentine\_0035, Sheila\_35, ShiVal\_35, Sigman\_35, SilverBell\_35, Simielle\_34, SirBeauregard\_35, Skippy\_35, Slatt\_35, Soile\_35, Solosis\_34, Sophia\_34, Soto\_35, Spartan300\_35, Squid\_35, Squiggle\_35, Struggle\_34, Suffolk\_35, Surely\_35, Swiphy\_36, Swish\_35, TA17A\_36, TallGrassMM\_35, Telesworld\_34, Thora\_35,

ThreeOh3D2\_35, Thunderbird\_34, Timmi\_34, Tinciduntolum\_36, TomBombadil\_35, Tomlarah\_35, Toni\_34, TooFast2Furius\_36, Tooj\_35, Tres\_35, True\_34, Trypo\_35, TyrionL\_34, UAch1\_35, UncleHowie\_35, Usavi\_35, Vaishali24\_34, Valjean\_35, Vaticameos\_35, Veritas\_34, Virapocalypse\_35, Virgeve\_34, Vista\_35, Vivaldi\_35, Vortex\_35, Wallhey\_34, Waterdiva\_35, Weher20\_35, West99\_35, Windsor\_34, Xavier\_34, Yoshand\_35, YouGoGlencoco\_35, Zaider\_36, Zelda\_35, Zonia\_35,

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

- AngelCake\_34, Cornbread\_35, Kaleb\_35, MrPhizzler\_34, Rimu\_36,

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

- Abinghost\_35, Acadian\_34, Ahwei\_31, Akoma\_35, AlanGrant\_33, Antihero\_31, Apex\_32, Ares\_35, Argie\_28, Athena\_36, Audrey\_35, Austelle\_33, Bae\_33, Baloo\_35, Ben11\_34, Bernardo\_35, BirdsNest\_36, BobbyK\_32, Briakila\_36, BrownCNA\_33, CRB2\_37, Casbah\_34, Cepens\_27, ChaChing\_35, Chalmers\_35, Chandler\_35, Chentzyk\_34, ChrisnMich\_31, Compostia\_36, Cooper\_32, Corofin\_35, D12\_27, Daisy\_35, Deenasa\_35, Devonte\_35, DigitDog\_34, Donny\_34, EastView9101\_33, Epah\_31, Fanaw\_31, FlagStaff\_25, Fortunato\_32, Frederick\_32, Gadget\_36, Gervas\_35, GinPorsche\_31, GlenHope\_36, Glubnar\_35, Godines\_35, Halfpint\_34, Hally898\_31, Hangman\_32, HarveySr\_35, Hashim76\_38, Heath\_31, Heathcliff\_35, Hydro\_32, Imvubu\_28, Indlovu\_32, JAMaL\_32, Jackstina\_32, JaguarMi\_32, Kamiyu\_35, KarasumaRum\_36, Knocker\_36, Kronus\_34, Lambano\_31, Laurie\_35, LestyG\_35, Lolalove\_32, MOOREtheMARYer\_26, Magpie\_31, Marley1013\_35, Marlia\_35, Megabear\_27, Mithril\_32, MmasiCarm\_35, Mortcellus\_34, Morty007\_35, Mudslide\_32, Mysterious\_35, Nanao\_31, Nangang\_34, Nehemiah\_33, Neos5\_35, Nigel\_30, Nozo\_35, Obutu\_35, Olivio\_34, OrangeOswald\_35, PR\_27, Pace1224\_25, PenguinLover67\_36, Phaedrus\_33, Phayeta\_36, Phelemich\_34, Philly\_34, Phlyer\_35, Pinnie\_26, Pipefish\_37, Poster\_31, Prince\_32, QueenPie\_31, Quesadilla\_36, Qyrzula\_33, RagingRooster\_35, RawrgerThat\_32, Reprobate\_34, Rich\_33, Rita130\_34, Rita1961\_35, RomaT\_35, Saguaro\_35, Serendipitous\_33, Shenandoah\_35, Shenyu\_34, SirJeffery\_34, SlippinJimmy\_35, Stinger\_30, StinkyVeggy\_36, Suigeneris\_34, SwainyDoc\_35, SynergyX\_35, Taptic\_27, Thonko\_33, TinyTerror\_35, Tydolla\_35, Vic9\_00035, Vincenzo\_33, VioletZ\_32, Waleliano\_32, Xincheng\_31, Yahalom\_35, Yinz\_35, Zemanar\_33, Zenteno07\_38,

### Summary by start number:

Start 59:

- Found in 404 of 474 ( 85.2% ) of genes in pham
- Manual Annotations of this start: 1 of 410
- Called 0.2% of time when present
- Phage (with cluster) where this start called: Bernardo\_35 (B3),

Start 62:

- Found in 2 of 474 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 2 of 410
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu\_28 (B10), Knocker\_36 (B9),

Start 64:

- Found in 3 of 474 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 2 of 410

- Called 66.7% of time when present
- Phage (with cluster) where this start called: Hashim76\_38 (B13), Saguario\_35 (B7),

Start 65:

- Found in 338 of 474 ( 71.3% ) of genes in pham
- Manual Annotations of this start: 306 of 410
- Called 98.5% of time when present
- Phage (with cluster) where this start called: 39HC\_029 (B6), 40BC\_029 (B6), ABU\_35 (B1), AbsoluteMadLad\_34 (B1), Adriana\_35 (B1), Aelin\_34 (B1), Allegro\_35 (B2), AltPhacts\_35 (B1), Altwerkus\_34 (B1), Anderson\_35 (B1), Andre\_35 (B1), Antonia\_34 (B1), Apizium\_34 (B1), Arbitr\_35 (B2), Ashraf\_34 (B1), Badfish\_35 (B1), Bananafish\_35 (B2), Banjo\_34 (B1), Basato\_36 (B1), BatteryCK\_34 (B1), Beaglebox\_34 (B1), Bishoperium\_34 (B1), BlackStallion\_35 (B1), Blocker23\_35 (B2), BlueHusk\_35 (B1), Bluephacebaby\_34 (B1), Boehler\_35 (B1), Boyle\_35 (B2), Brilliant\_35 (B1), Brownie5\_35 (B2), Buckeye\_35 (B1), Burr\_34 (B1), Calamitous\_35 (B2), CamL\_35 (B1), CampRoach\_35 (B1), Cannibal\_35 (B1), Carthage\_33 (B1), Caspiboi\_36 (B1), Chaelin\_35 (B1), Chah\_36 (B1), Charles1\_35 (B1), CharlieGBrown\_34 (B1), CheetO\_35 (B1), Cher\_34 (B1), Childish\_34 (B1), Chipette\_36 (B1), Chorkpop\_35 (B1), Chunky\_35 (B1), Chute\_34 (B1), Cobra\_35 (B1), Coffee\_35 (B2), Colbert\_35 (B1), Coletti\_34 (B1), Cornobble\_34 (B1), Cosmolli16\_34 (B1), Craff\_35 (B1), Crownjwl\_35 (B1), DaddyDaniels\_35 (B1), Daffy\_35 (B1), Daka\_35 (B1), Dati\_35 (B1), DelRivs\_34 (B1), Derpp\_34 (B1), Dice\_34 (B1), Dingo\_35 (B1), Dione\_34 (B1), DirtJuice\_35 (B1), Doddsville\_35 (B1), DoesntMatter\_35 (B1), DonSanchon\_34 (B1), Dori\_31 (AD), DuchessDung\_33 (B1), Duggie\_34 (B1), Durga\_35 (B1), Eaglehorse\_35 (B2), ElvisPhasley\_35 (B1), Emiris\_35 (B1), EmpTee\_35 (B1), Eremos\_35 (B1), Etaye\_35 (B1), Eugenia\_35 (B1), Fang\_35 (B1), Faze9\_35 (B2), FluffyNinja\_35 (B1), ForDig\_30 (B6), Fozzie\_34 (B1), Frankicide\_35 (B1), FrenchFry\_35 (B2), Freya\_34 (B1), FriarPreacher\_35 (B1), Fringe\_35 (B1), FugateOSU\_34 (B1), Funsized\_37 (B9), Gareth\_34 (B1), GeneCoco\_35 (B1), Giraffe\_35 (B1), Glass\_35 (B2), GodPhather\_28 (W), Gophee\_35 (B1), Grand2040\_34 (B1), Gwennie1\_35 (B1), Gwilliam\_35 (B1), Gyarad\_0035 (B1), HSavage\_35 (B1), Haimas\_35 (B1), Haleema\_34 (B1), Hamish\_35 (B1), Hartsy\_35 (B1), Harvey\_35 (B1), Hedgerow\_35 (B2), Held\_35 (B1), HenryJackson\_34 (B1), Hertubise\_35 (B1), Hetaeria\_35 (B1), HighStump\_34 (B1), Hocus\_34 (B1), Holeinone\_35 (B2), Horchata\_35 (B1), Hosp\_027 (B6), ImtiyazSitla\_34 (B1), Inchworm\_35 (B1), Inverness\_35 (B1), Iridessa\_35 (B1), Iridoclysis\_35 (B1), IsaacEli\_35 (B1), ItsyBitsy1\_35 (B2), JDog\_34 (B1), JacAttac\_35 (B1), JakeO\_34 (B1), JangoPhett\_35 (B1), Jeon\_27 (W), Jesabah\_35 (B1), Jillium\_34 (B1), Jiminy\_34 (B1), Jiraiya\_34 (B1), Jolie1\_029 (B6), KLucky39\_35 (B1), Kahve\_34 (B1), Kailash\_35 (B1), Katniss\_35 (B1), KayaCho\_29 (B6), Keitherie\_35 (B1), Khan1\_35 (B1), Kheth\_35 (B2), Kikipoo\_35 (B1), Kimbrough\_35 (B1), KingTut\_26 (B1), KingVeVeVe\_35 (B1), KlimbOn\_35 (B1), Kloppinator\_35 (B1), Kolhan\_35 (B2), Kwadwo\_34 (B1), Kwksand96\_34 (B1), Labeouficaum\_34 (B1), Lars\_35 (B2), LasagnaCat\_35 (B1), Lasso\_35 (B1), LeeLot\_35 (B1), Lego3393\_35 (B1), Legolas\_34 (B1), LeiMonet\_35 (B1), LemonSlice\_35 (B1), Lephleur\_35 (B2), LilMcDreamy\_30 (B12), LilSmirk\_35 (B2), LizLemon\_35 (B2), Longacauda\_34 (B1), Lopsy\_34 (B1), LostAndPhound\_34 (B1), LuckyMarjie\_34 (B1), Lulumae\_34 (B1), Lulwa\_35 (B1), Lumine\_34 (B1), MRabcd\_34 (B1), Mag7\_34 (B1), Magic8\_35 (B1), Mana\_34 (B1), Manad\_34 (B1), Mao1\_29 (AD), Maru\_34 (B1), Mask\_30 (AD), Maskar\_34 (B1), MasterPo\_35 (B2), Matalotodo\_35 (B1), Mcshane\_34 (B1), Mecca\_34 (B1), Megamind20\_35 (B1), Megatron\_35 (B1), Melc17\_35 (B1), MelsMeow\_34 (B1), Mesh1\_35 (B1), Mesmerelda\_35 (B1), MichaelPhcott\_34 (B1), Mikota\_35 (B1), MiniBoss\_35 (B1), MitKao\_35 (B1), Morgushi\_35 (B1), Morty\_35



(B1), Mosaic\_34 (B1), Mulan\_34 (B1), Murdoc\_35 (B1), Mutante\_34 (B1), Nacho\_0035 (B1), Nathan\_36 (B1), Newman\_35 (B1), Nicole21\_35 (B1), Numberten\_35 (B1), Nyala\_34 (B1), OSmaximus\_35 (B1), Olak\_34 (B1), Oline\_34 (B1), Olive\_35 (B1), OliverWalter\_35 (B1), Omniscient\_35 (B1), Oosterbaan\_35 (B1), Opia\_35 (B2), Orfeu\_34 (B1), Orion\_35 (B1), Orwigg\_34 (B1), PG1\_35 (B1), Pacifista\_34 (B1), Phamished\_35 (B1), Phantasmagoria\_35 (B2), Phareon\_35 (B1), PhatCats2014\_35 (B1), PhatLouie\_35 (B1), PhenghisKhan\_34 (B1), Pherdinand\_35 (B1), Phergie\_34 (B1), Phipps\_35 (B1), Phleuron\_34 (B1), PhrankReynolds\_34 (B1), PhrodoBaggins\_34 (B1), Phunky\_35 (B1), Piglet\_0034 (B1), PinheadLarry\_35 (B1), Pinkman\_34 (B1), Pipsqueak\_35 (B1), Placalicious\_34 (B1), Plata\_35 (B1), Plmatters\_35 (B1), Podrick\_35 (B1), Pops\_35 (B1), Potter\_34 (B1), Prickles\_35 (B1), PrinceCharming\_35 (B2), ProfessorX\_35 (B1), Puhltonio\_35 (B1), QueenBeane\_35 (B1), Quisquillae\_35 (B1), RedMaple\_34 (B1), Rhinoforte\_35 (B2), Ricotta\_34 (B1), Riggan\_35 (B1), Rinkes\_36 (B9), Riverton\_34 (B1), Robyn\_34 (B1), Roliet\_35 (B1), Roscoe\_36 (B1), Rosebush\_35 (B2), Roy17\_35 (B1), SDcharge11\_35 (B1), Sabella\_35 (B2), Samaymay\_35 (B1), SassyCat97\_34 (B1), Schadenfreude\_34 (B1), Schueller\_34 (B1), Scoot17C\_35 (B1), Scrick\_35 (B1), Sejanus\_30 (AD), Selr12\_35 (B1), Serendipity\_35 (B1), Serpentine\_0035 (B1), Sheila\_35 (B1), ShiVal\_35 (B1), Sigman\_35 (B1), SilverBell\_35 (B1), Simielle\_34 (B1), SirBeauregard\_35 (B1), Skippy\_35 (B1), Slatt\_35 (B1), Soile\_35 (B1), Solosis\_34 (B1), Sophia\_34 (B1), Soto\_35 (B1), Spartan300\_35 (B1), Squid\_35 (B1), Squiggle\_35 (B1), Struggle\_34 (B1), Suffolk\_35 (B1), Surely\_35 (B1), Swiphy\_36 (B1), Swish\_35 (B1), TA17A\_36 (B2), TallGrassMM\_35 (B1), Telesworld\_34 (B1), Thora\_35 (B1), ThreeOh3D2\_35 (B1), Thunderbird\_34 (B1), Timmi\_34 (B1), Tinciduntolum\_36 (B2), TomBombadil\_35 (B1), Tomlarah\_35 (B1), Toni\_34 (B1), TooFast2Furius\_36 (B1), Tooj\_35 (B1), Tres\_35 (B2), True\_34 (B1), Trypo\_35 (B1), TyrionL\_34 (B1), UAch1\_35 (B1), UncleHowie\_35 (B1), Usavi\_35 (B1), Vaishali24\_34 (B1), Valjean\_35 (B1), Vaticameos\_35 (B1), Veritas\_34 (B1), Virapocalypse\_35 (B1), Virgeve\_34 (B1), Vista\_35 (B1), Vivaldi\_35 (B1), Vortex\_35 (B1), Wallhey\_34 (B1), Waterdiva\_35 (B1), Weher20\_35 (B1), West99\_35 (B2), Windsor\_34 (B1), Xavier\_34 (B1), Yoshand\_35 (B1), YouGoGlencoco\_35 (B1), Zaider\_36 (B1), Zelda\_35 (B1), Zonia\_35 (B1),

Start 66:

- Found in 90 of 474 ( 19.0% ) of genes in pham
- Manual Annotations of this start: 69 of 410
- Called 98.9% of time when present
- Phage (with cluster) where this start called: Abinghost\_35 (B3), Acadian\_34 (B5), Akoma\_35 (B3), Ares\_35 (B2), Argie\_28 (W), Athena\_36 (B3), Audrey\_35 (B3), Bae\_33 (B5), Baloo\_35 (B3), Ben11\_34 (B3), BirdsNest\_36 (B13), Briakila\_36 (B3), Casbah\_34 (B3), Cepens\_27 (W), ChaChing\_35 (B3), Chalmers\_35 (B3), Chandler\_35 (B3), Chentzyk\_34 (B3), Compostia\_36 (B3), Corofin\_35 (B3), D12\_27 (W), Daisy\_35 (B3), Deenasa\_35 (B3), Devonte\_35 (B3), DigitDog\_34 (B5), Donny\_34 (B5), EastView9101\_33 (B5), FlagStaff\_25 (G2), Gadget\_36 (B3), Gervas\_35 (B3), GlenHope\_36 (B3), Glubnar\_35 (B3), Godines\_35 (B2), Halfpint\_34 (B3), HarveySr\_35 (B3), Heathcliff\_35 (B3), Jackstina\_32 (B3), Kamiyu\_35 (B3), KarasumaRum\_36 (B5), Kronus\_34 (B3), Laurie\_35 (B2), LestyG\_35 (B3), MOOREtheMARYer\_26 (G3), Marley1013\_35 (B3), Marlia\_35 (B3), Megabear\_27 (W), MmasiCarm\_35 (B3), Mortcellus\_34 (B3), Morty007\_35 (B3), Mysterious\_35 (B5), Nangang\_34 (B5), Nehemiah\_33 (B5), Neos5\_35 (B3), Nozo\_35 (B3), Obutu\_35 (B3), Olivio\_34 (B3), OrangeOswald\_35 (B3), PR\_27 (W), Pace1224\_25 (G2), Phaedrus\_33 (B3), Phayeta\_36 (B3), Phelemich\_34 (B5), Philly\_34 (B3), Phlyer\_35 (B3), Pinnie\_26 (G3), Pipefish\_37 (B3), Qyrzula\_33 (B2), RagingRooster\_35 (B3), Reprobate\_34 (B5), Rich\_33 (B5), Rita130\_34 (B5),

Rita1961\_35 (B3), RomaT\_35 (B3), Serendipitous\_33 (B5), Shenandoah\_35 (B3), Shenyu\_34 (B5), SirJeffery\_34 (B5), SlippinJimmy\_35 (B3), StinkyVeggy\_36 (B5), Suigeneris\_34 (B5), SwainyDoc\_35 (B3), SynergyX\_35 (B3), Taptic\_27 (W), Thonko\_33 (B8), TinyTerror\_35 (B3), Tydolla\_35 (B3), Vic9\_00035 (B2), Yahalom\_35 (B3), Yinz\_35 (B3),

Start 67:

- Found in 42 of 474 ( 8.9% ) of genes in pham
- Manual Annotations of this start: 30 of 410
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ahwei\_31 (B4), AlanGrant\_33 (B4), Antihero\_31 (B4), Apex\_32 (B4), Austelle\_33 (B4), BobbyK\_32 (B4), BrownCNA\_33 (B4), CRB2\_37 (B9), ChrisnMich\_31 (B4), Cooper\_32 (B4), Epah\_31 (B4), Fanaw\_31 (B4), Fortunato\_32 (B4), Frederick\_32 (B4), GinPorsche\_31 (B4), Hally898\_31 (B4), Hangman\_32 (B4), Heath\_31 (B4), Hydro\_32 (B4), Indlovu\_32 (B11), JAMaL\_32 (B4), JaguarMi\_32 (B4), Lambano\_31 (B4), Lolalove\_32 (B4), Magpie\_31 (B4), Mithril\_32 (B4), Mudslide\_32 (B4), Nanao\_31 (B4), Nigel\_30 (B4), PenguinLover67\_36 (B9), Poster\_31 (B4), Prince\_32 (B4), QueenPie\_31 (B4), Quesadilla\_36 (B9), RawrgerThat\_32 (B4), Stinger\_30 (B4), Vincenzo\_33 (B4), VioletZ\_32 (B4), Waleliano\_32 (B4), Xincheng\_31 (B4), Zemanar\_33 (B4), Zenteno07\_38 (B13),

Start 78:

- Found in 317 of 474 ( 66.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 1.3% of time when present
- Phage (with cluster) where this start called: Cornbread\_35 (B1), Kaleb\_35 (B2), MrPhizzler\_34 (B1), Rimu\_36 (B1),

Start 80:

- Found in 298 of 474 ( 62.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 0.3% of time when present
- Phage (with cluster) where this start called: AngelCake\_34 (B1),

### **Summary by clusters:**

There are 17 clusters represented in this pham: G3, W, B8, G2, B11, B4, B5, B6, B7, B12, B13, B2, B3, AD, B10, B9, B1,

Info for manual annotations of cluster AD:

- Start number 65 was manually annotated 4 times for cluster AD.

Info for manual annotations of cluster B1:

- Start number 65 was manually annotated 267 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 62 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 67 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 65 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 64 was manually annotated 1 time for cluster B13.
- Start number 66 was manually annotated 1 time for cluster B13.
- Start number 67 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster B2:

- Start number 65 was manually annotated 29 times for cluster B2.
- Start number 66 was manually annotated 5 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 59 was manually annotated 1 time for cluster B3.
- Start number 66 was manually annotated 44 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 67 was manually annotated 25 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 66 was manually annotated 9 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 65 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 64 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 66 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 62 was manually annotated 1 time for cluster B9.
- Start number 65 was manually annotated 2 times for cluster B9.
- Start number 67 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster G2:

- Start number 66 was manually annotated 1 time for cluster G2.

Info for manual annotations of cluster G3:

- Start number 66 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster W:

- Start number 65 was manually annotated 2 times for cluster W.
- Start number 66 was manually annotated 6 times for cluster W.

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

Gene: 39HC\_029 Start: 31698, Stop: 32078, Start Num: 65

Candidate Starts for 39HC\_029:

(Start: 65 @31698 has 306 MA's), (70, 31728), (71, 31740), (80, 31764), (89, 31809), (91, 31824), (101, 31878), (104, 31899), (110, 31944), (128, 32031), (131, 32040), (133, 32052), (136, 32067),

(139, 32070),

Gene: 40BC\_029 Start: 31698, Stop: 32078, Start Num: 65

Candidate Starts for 40BC\_029:

(Start: 65 @31698 has 306 MA's), (70, 31728), (71, 31740), (80, 31764), (89, 31809), (91, 31824), (101, 31878), (104, 31899), (110, 31944), (128, 32031), (131, 32040), (133, 32052), (136, 32067), (139, 32070),

Gene: ABU\_35 Start: 33953, Stop: 34339, Start Num: 65

Candidate Starts for ABU\_35:

(55, 33812), (Start: 59 @33848 has 1 MA's), (Start: 65 @33953 has 306 MA's), (70, 33992), (78, 34028), (80, 34031), (101, 34139), (106, 34166), (119, 34238), (131, 34298),

Gene: Abinghost\_35 Start: 33840, Stop: 34265, Start Num: 66

Candidate Starts for Abinghost\_35:

(Start: 59 @33735 has 1 MA's), (Start: 66 @33840 has 69 MA's), (81, 33918), (86, 33951), (88, 33960), (101, 34068), (105, 34089), (108, 34125), (110, 34131), (115, 34143), (118, 34167), (125, 34185), (136, 34254),

Gene: AbsoluteMadLad\_34 Start: 33962, Stop: 34348, Start Num: 65

Candidate Starts for AbsoluteMadLad\_34:

(55, 33821), (Start: 59 @33857 has 1 MA's), (Start: 65 @33962 has 306 MA's), (70, 34001), (78, 34037), (80, 34040), (101, 34148), (106, 34175), (119, 34247), (131, 34307),

Gene: Acadian\_34 Start: 34513, Stop: 34947, Start Num: 66

Candidate Starts for Acadian\_34:

(54, 34336), (Start: 59 @34408 has 1 MA's), (Start: 66 @34513 has 69 MA's), (70, 34555), (71, 34567), (79, 34594), (92, 34690), (97, 34717), (101, 34747), (105, 34768), (107, 34777),

Gene: Adriana\_35 Start: 33951, Stop: 34337, Start Num: 65

Candidate Starts for Adriana\_35:

(55, 33810), (Start: 59 @33846 has 1 MA's), (Start: 65 @33951 has 306 MA's), (70, 33990), (78, 34026), (80, 34029), (101, 34137), (106, 34164), (119, 34236), (131, 34296),

Gene: Aelin\_34 Start: 33517, Stop: 33903, Start Num: 65

Candidate Starts for Aelin\_34:

(55, 33376), (Start: 59 @33412 has 1 MA's), (Start: 65 @33517 has 306 MA's), (70, 33556), (78, 33592), (80, 33595), (101, 33703), (106, 33730), (119, 33802), (131, 33862),

Gene: Ahwei\_31 Start: 33148, Stop: 33501, Start Num: 67

Candidate Starts for Ahwei\_31:

(Start: 67 @33148 has 30 MA's), (70, 33169), (75, 33196), (96, 33298), (107, 33334), (123, 33415), (124, 33418), (135, 33481),

Gene: Akoma\_35 Start: 33844, Stop: 34269, Start Num: 66

Candidate Starts for Akoma\_35:

(Start: 59 @33739 has 1 MA's), (Start: 66 @33844 has 69 MA's), (81, 33922), (86, 33955), (88, 33964), (101, 34072), (105, 34093), (107, 34102), (108, 34129), (110, 34135), (115, 34147), (118, 34171), (125, 34189), (136, 34258),

Gene: AlanGrant\_33 Start: 34896, Stop: 35249, Start Num: 67

Candidate Starts for AlanGrant\_33:

(Start: 67 @34896 has 30 MA's), (70, 34917), (75, 34944), (96, 35046), (107, 35082), (108, 35109), (123, 35163), (135, 35229),

Gene: Allegro\_35 Start: 34275, Stop: 34664, Start Num: 65

Candidate Starts for Allegro\_35:

(55, 34134), (Start: 59 @34170 has 1 MA's), (Start: 65 @34275 has 306 MA's), (70, 34314), (78, 34350), (92, 34425), (101, 34461), (106, 34488), (110, 34524), (119, 34560), (121, 34563), (131, 34620), (138, 34653),

Gene: AltPhacts\_35 Start: 33940, Stop: 34326, Start Num: 65

Candidate Starts for AltPhacts\_35:

(55, 33799), (Start: 59 @33835 has 1 MA's), (Start: 65 @33940 has 306 MA's), (70, 33979), (78, 34015), (80, 34018), (101, 34126), (106, 34153), (119, 34225), (131, 34285),

Gene: Altwerkus\_34 Start: 33641, Stop: 34027, Start Num: 65

Candidate Starts for Altwerkus\_34:

(55, 33500), (Start: 59 @33536 has 1 MA's), (Start: 65 @33641 has 306 MA's), (70, 33680), (78, 33716), (80, 33719), (101, 33827), (106, 33854), (119, 33926), (131, 33986),

Gene: Anderson\_35 Start: 33946, Stop: 34332, Start Num: 65

Candidate Starts for Anderson\_35:

(55, 33805), (Start: 59 @33841 has 1 MA's), (Start: 65 @33946 has 306 MA's), (70, 33985), (78, 34021), (80, 34024), (101, 34132), (106, 34159), (119, 34231), (131, 34291),

Gene: Andre\_35 Start: 33945, Stop: 34331, Start Num: 65

Candidate Starts for Andre\_35:

(55, 33804), (Start: 59 @33840 has 1 MA's), (Start: 65 @33945 has 306 MA's), (70, 33984), (78, 34020), (80, 34023), (101, 34131), (106, 34158), (119, 34230), (131, 34290),

Gene: AngelCake\_34 Start: 34043, Stop: 34351, Start Num: 80

Candidate Starts for AngelCake\_34:

(55, 33824), (Start: 59 @33860 has 1 MA's), (Start: 65 @33965 has 306 MA's), (70, 34004), (78, 34040), (80, 34043), (101, 34151), (106, 34178), (119, 34250), (131, 34310),

Gene: Antihero\_31 Start: 33148, Stop: 33501, Start Num: 67

Candidate Starts for Antihero\_31:

(Start: 67 @33148 has 30 MA's), (70, 33169), (75, 33196), (96, 33298), (107, 33334), (123, 33415), (124, 33418), (135, 33481),

Gene: Antonia\_34 Start: 33517, Stop: 33903, Start Num: 65

Candidate Starts for Antonia\_34:

(55, 33376), (Start: 59 @33412 has 1 MA's), (Start: 65 @33517 has 306 MA's), (70, 33556), (78, 33592), (80, 33595), (101, 33703), (106, 33730), (119, 33802), (131, 33862),

Gene: Apex\_32 Start: 34354, Stop: 34707, Start Num: 67

Candidate Starts for Apex\_32:

(Start: 67 @34354 has 30 MA's), (70, 34375), (75, 34402), (96, 34504), (107, 34540), (123, 34621), (124, 34624), (135, 34687),

Gene: Apizium\_34 Start: 33709, Stop: 34095, Start Num: 65

Candidate Starts for Apizium\_34:

(55, 33568), (Start: 59 @33604 has 1 MA's), (Start: 65 @33709 has 306 MA's), (70, 33748), (78, 33784), (80, 33787), (101, 33895), (106, 33922), (119, 33994), (131, 34054),

Gene: Arbiter\_35 Start: 34364, Stop: 34753, Start Num: 65

Candidate Starts for Arbiter\_35:

(55, 34223), (Start: 59 @34259 has 1 MA's), (Start: 65 @34364 has 306 MA's), (70, 34403), (92, 34514), (101, 34550), (106, 34577), (110, 34613), (119, 34649), (121, 34652), (131, 34709), (138, 34742),

Gene: Ares\_35 Start: 34315, Stop: 34737, Start Num: 66

Candidate Starts for Ares\_35:

(29, 33772), (30, 33775), (38, 33826), (46, 33865), (47, 33907), (54, 34138), (Start: 59 @34210 has 1 MA's), (Start: 66 @34315 has 69 MA's), (70, 34345), (83, 34405), (99, 34525), (101, 34540), (105, 34561), (107, 34570), (110, 34603), (117, 34627), (136, 34726),

Gene: Argie\_28 Start: 31290, Stop: 31712, Start Num: 66

Candidate Starts for Argie\_28:

(Start: 66 @31290 has 69 MA's), (70, 31320), (83, 31380), (88, 31407), (99, 31500), (101, 31515), (105, 31536), (108, 31572), (109, 31575), (110, 31578), (117, 31602), (126, 31641),

Gene: Ashraf\_34 Start: 33513, Stop: 33899, Start Num: 65

Candidate Starts for Ashraf\_34:

(55, 33372), (Start: 59 @33408 has 1 MA's), (Start: 65 @33513 has 306 MA's), (70, 33552), (78, 33588), (80, 33591), (101, 33699), (106, 33726), (119, 33798), (131, 33858),

Gene: Athena\_36 Start: 34591, Stop: 35016, Start Num: 66

Candidate Starts for Athena\_36:

(Start: 59 @34486 has 1 MA's), (Start: 66 @34591 has 69 MA's), (81, 34669), (86, 34702), (88, 34711), (105, 34840), (108, 34876), (110, 34882), (115, 34894), (118, 34918), (125, 34936), (136, 35005),

Gene: Audrey\_35 Start: 33840, Stop: 34265, Start Num: 66

Candidate Starts for Audrey\_35:

(Start: 59 @33735 has 1 MA's), (Start: 66 @33840 has 69 MA's), (81, 33918), (86, 33951), (88, 33960), (105, 34089), (108, 34125), (110, 34131), (115, 34143), (118, 34167), (125, 34185), (136, 34254),

Gene: Austelle\_33 Start: 34810, Stop: 35163, Start Num: 67

Candidate Starts for Austelle\_33:

(Start: 67 @34810 has 30 MA's), (70, 34831), (75, 34858), (96, 34960), (107, 34996), (123, 35077), (124, 35080), (135, 35143),

Gene: Badfish\_35 Start: 33975, Stop: 34361, Start Num: 65

Candidate Starts for Badfish\_35:

(55, 33834), (Start: 59 @33870 has 1 MA's), (Start: 65 @33975 has 306 MA's), (70, 34014), (78, 34050), (80, 34053), (101, 34161), (106, 34188), (119, 34260), (131, 34320),

Gene: Bae\_33 Start: 34330, Stop: 34764, Start Num: 66

Candidate Starts for Bae\_33:

(54, 34150), (Start: 66 @34330 has 69 MA's), (70, 34372), (79, 34411), (98, 34543), (101, 34564), (105, 34585), (107, 34594), (130, 34723),

Gene: Baloo\_35 Start: 33843, Stop: 34268, Start Num: 66

Candidate Starts for Baloo\_35:

(Start: 59 @33738 has 1 MA's), (Start: 66 @33843 has 69 MA's), (81, 33921), (86, 33954), (88, 33963), (105, 34092), (108, 34128), (110, 34134), (115, 34146), (118, 34170), (125, 34188), (136, 34257),

Gene: Bananafish\_35 Start: 34284, Stop: 34673, Start Num: 65

Candidate Starts for Bananafish\_35:

(55, 34143), (Start: 59 @34179 has 1 MA's), (Start: 65 @34284 has 306 MA's), (70, 34323), (101, 34470), (106, 34497), (110, 34533), (119, 34569), (121, 34572), (131, 34629), (138, 34662),

Gene: Banjo\_34 Start: 33651, Stop: 34037, Start Num: 65

Candidate Starts for Banjo\_34:

(55, 33510), (Start: 59 @33546 has 1 MA's), (Start: 65 @33651 has 306 MA's), (70, 33690), (78, 33726), (80, 33729), (101, 33837), (106, 33864), (119, 33936), (131, 33996),

Gene: Basato\_36 Start: 34230, Stop: 34616, Start Num: 65

Candidate Starts for Basato\_36:

(55, 34089), (Start: 59 @34125 has 1 MA's), (Start: 65 @34230 has 306 MA's), (70, 34269), (78, 34305), (80, 34308), (101, 34416), (106, 34443), (119, 34515), (131, 34575),

Gene: BatteryCK\_34 Start: 33570, Stop: 33956, Start Num: 65

Candidate Starts for BatteryCK\_34:

(55, 33429), (Start: 59 @33465 has 1 MA's), (Start: 65 @33570 has 306 MA's), (70, 33609), (78, 33645), (80, 33648), (101, 33756), (106, 33783), (119, 33855), (131, 33915),

Gene: Beaglebox\_34 Start: 33672, Stop: 34058, Start Num: 65

Candidate Starts for Beaglebox\_34:

(55, 33531), (Start: 59 @33567 has 1 MA's), (Start: 65 @33672 has 306 MA's), (70, 33711), (78, 33747), (80, 33750), (101, 33858), (106, 33885), (119, 33957), (131, 34017),

Gene: Ben11\_34 Start: 33662, Stop: 34087, Start Num: 66

Candidate Starts for Ben11\_34:

(Start: 59 @33557 has 1 MA's), (Start: 66 @33662 has 69 MA's), (86, 33773), (88, 33782), (101, 33890), (105, 33911), (108, 33947), (110, 33953), (115, 33965), (118, 33989), (125, 34007), (136, 34076),

Gene: Bernardo\_35 Start: 33825, Stop: 34355, Start Num: 59

Candidate Starts for Bernardo\_35:

(Start: 59 @33825 has 1 MA's), (Start: 66 @33930 has 69 MA's), (81, 34008), (86, 34041), (88, 34050), (101, 34158), (105, 34179), (108, 34215), (110, 34221), (115, 34233), (118, 34257), (125, 34275), (136, 34344),

Gene: BirdsNest\_36 Start: 32603, Stop: 32965, Start Num: 66

Candidate Starts for BirdsNest\_36:

(Start: 66 @32603 has 69 MA's), (73, 32660), (88, 32705), (105, 32783), (129, 32918), (136, 32951),

Gene: Bishoperium\_34 Start: 33660, Stop: 34046, Start Num: 65

Candidate Starts for Bishoperium\_34:

(55, 33519), (Start: 59 @33555 has 1 MA's), (Start: 65 @33660 has 306 MA's), (70, 33699), (78, 33735), (80, 33738), (101, 33846), (106, 33873), (119, 33945), (131, 34005),

Gene: BlackStallion\_35 Start: 33962, Stop: 34348, Start Num: 65

Candidate Starts for BlackStallion\_35:

(55, 33821), (Start: 59 @33857 has 1 MA's), (Start: 65 @33962 has 306 MA's), (70, 34001), (78, 34037), (80, 34040), (101, 34148), (106, 34175), (119, 34247), (131, 34307),

Gene: Blocker23\_35 Start: 34402, Stop: 34791, Start Num: 65

Candidate Starts for Blocker23\_35:

(55, 34261), (Start: 59 @34297 has 1 MA's), (Start: 65 @34402 has 306 MA's), (70, 34441), (78, 34477), (92, 34552), (101, 34588), (106, 34615), (110, 34651), (119, 34687), (121, 34690), (131, 34747), (138, 34780),

Gene: BlueHusk\_35 Start: 33459, Stop: 33845, Start Num: 65

Candidate Starts for BlueHusk\_35:

(55, 33318), (Start: 59 @33354 has 1 MA's), (Start: 65 @33459 has 306 MA's), (70, 33498), (78, 33534), (80, 33537), (101, 33645), (106, 33672), (119, 33744), (131, 33804),

Gene: Bluephacebaby\_34 Start: 33657, Stop: 34043, Start Num: 65

Candidate Starts for Bluephacebaby\_34:

(55, 33516), (Start: 59 @33552 has 1 MA's), (Start: 65 @33657 has 306 MA's), (70, 33696), (78, 33732), (80, 33735), (101, 33843), (106, 33870), (119, 33942), (131, 34002),

Gene: BobbyK\_32 Start: 34179, Stop: 34532, Start Num: 67

Candidate Starts for BobbyK\_32:

(Start: 67 @34179 has 30 MA's), (70, 34200), (75, 34227), (96, 34329), (107, 34365), (123, 34446), (124, 34449), (135, 34512),

Gene: Boehler\_35 Start: 33963, Stop: 34349, Start Num: 65

Candidate Starts for Boehler\_35:

(55, 33822), (Start: 59 @33858 has 1 MA's), (Start: 65 @33963 has 306 MA's), (70, 34002), (78, 34038), (80, 34041), (101, 34149), (106, 34176), (119, 34248), (131, 34308),

Gene: Boyle\_35 Start: 34403, Stop: 34792, Start Num: 65

Candidate Starts for Boyle\_35:

(55, 34262), (Start: 59 @34298 has 1 MA's), (Start: 65 @34403 has 306 MA's), (70, 34442), (78, 34478), (92, 34553), (101, 34589), (106, 34616), (110, 34652), (119, 34688), (121, 34691), (131, 34748), (138, 34781),

Gene: Briakila\_36 Start: 34610, Stop: 35035, Start Num: 66

Candidate Starts for Briakila\_36:

(Start: 59 @34505 has 1 MA's), (Start: 66 @34610 has 69 MA's), (81, 34688), (86, 34721), (88, 34730), (101, 34838), (105, 34859), (107, 34868), (108, 34895), (110, 34901), (115, 34913), (118, 34937), (125, 34955), (136, 35024),

Gene: Brilliant\_35 Start: 33668, Stop: 34054, Start Num: 65

Candidate Starts for Brilliant\_35:

(55, 33527), (Start: 59 @33563 has 1 MA's), (Start: 65 @33668 has 306 MA's), (70, 33707), (78, 33743), (80, 33746), (101, 33854), (106, 33881), (119, 33953), (131, 34013),

Gene: BrownCNA\_33 Start: 34440, Stop: 34793, Start Num: 67

Candidate Starts for BrownCNA\_33:

(Start: 67 @34440 has 30 MA's), (70, 34461), (75, 34488), (96, 34590), (107, 34626), (108, 34653), (123, 34707), (135, 34773),

Gene: Brownie5\_35 Start: 34409, Stop: 34798, Start Num: 65

Candidate Starts for Brownie5\_35:

(55, 34268), (Start: 59 @34304 has 1 MA's), (Start: 65 @34409 has 306 MA's), (70, 34448), (78, 34484), (92, 34559), (101, 34595), (106, 34622), (110, 34658), (119, 34694), (121, 34697), (131, 34754), (138, 34787),

Gene: Buckeye\_35 Start: 33980, Stop: 34366, Start Num: 65



Candidate Starts for Buckeye\_35:

(55, 33839), (Start: 59 @33875 has 1 MA's), (Start: 65 @33980 has 306 MA's), (70, 34019), (78, 34055), (80, 34058), (101, 34166), (106, 34193), (119, 34265), (131, 34325),

Gene: Burr\_34 Start: 33657, Stop: 34043, Start Num: 65

Candidate Starts for Burr\_34:

(55, 33516), (Start: 59 @33552 has 1 MA's), (Start: 65 @33657 has 306 MA's), (70, 33696), (78, 33732), (80, 33735), (101, 33843), (106, 33870), (119, 33942), (131, 34002),

Gene: CRB2\_37 Start: 36313, Stop: 36672, Start Num: 67

Candidate Starts for CRB2\_37:

(Start: 67 @36313 has 30 MA's), (83, 36385), (127, 36613), (128, 36622), (134, 36646),

Gene: Calamitous\_35 Start: 34289, Stop: 34678, Start Num: 65

Candidate Starts for Calamitous\_35:

(55, 34148), (Start: 59 @34184 has 1 MA's), (Start: 65 @34289 has 306 MA's), (70, 34328), (78, 34364), (92, 34439), (101, 34475), (106, 34502), (110, 34538), (119, 34574), (121, 34577), (131, 34634), (138, 34667),

Gene: CamL\_35 Start: 33958, Stop: 34344, Start Num: 65

Candidate Starts for CamL\_35:

(55, 33817), (Start: 59 @33853 has 1 MA's), (Start: 65 @33958 has 306 MA's), (70, 33997), (78, 34033), (80, 34036), (101, 34144), (106, 34171), (119, 34243), (131, 34303),

Gene: CampRoach\_35 Start: 33948, Stop: 34334, Start Num: 65

Candidate Starts for CampRoach\_35:

(55, 33807), (Start: 59 @33843 has 1 MA's), (Start: 65 @33948 has 306 MA's), (70, 33987), (78, 34023), (80, 34026), (101, 34134), (106, 34161), (119, 34233), (131, 34293),

Gene: Cannibal\_35 Start: 33941, Stop: 34327, Start Num: 65

Candidate Starts for Cannibal\_35:

(55, 33800), (Start: 59 @33836 has 1 MA's), (Start: 65 @33941 has 306 MA's), (70, 33980), (78, 34016), (80, 34019), (101, 34127), (106, 34154), (119, 34226), (131, 34286),

Gene: Carthage\_33 Start: 32870, Stop: 33256, Start Num: 65

Candidate Starts for Carthage\_33:

(55, 32729), (Start: 59 @32765 has 1 MA's), (Start: 65 @32870 has 306 MA's), (70, 32909), (78, 32945), (80, 32948), (101, 33056), (106, 33083), (119, 33155), (131, 33215),

Gene: Casbah\_34 Start: 33692, Stop: 34117, Start Num: 66

Candidate Starts for Casbah\_34:

(Start: 59 @33587 has 1 MA's), (Start: 66 @33692 has 69 MA's), (86, 33803), (88, 33812), (101, 33920), (105, 33941), (108, 33977), (110, 33983), (115, 33995), (118, 34019), (125, 34037), (136, 34106),

Gene: Caspiboi\_36 Start: 33667, Stop: 34053, Start Num: 65

Candidate Starts for Caspiboi\_36:

(55, 33526), (Start: 59 @33562 has 1 MA's), (Start: 65 @33667 has 306 MA's), (70, 33706), (78, 33742), (80, 33745), (101, 33853), (106, 33880), (119, 33952), (131, 34012),

Gene: Cepens\_27 Start: 31005, Stop: 31427, Start Num: 66

Candidate Starts for Cepens\_27:

(Start: 66 @31005 has 69 MA's), (70, 31035), (83, 31095), (88, 31122), (99, 31215), (101, 31230), (108, 31287), (109, 31290), (110, 31293), (117, 31317), (126, 31356),

Gene: ChaChing\_35 Start: 33855, Stop: 34280, Start Num: 66

Candidate Starts for ChaChing\_35:

(Start: 59 @33750 has 1 MA's), (Start: 66 @33855 has 69 MA's), (81, 33933), (86, 33966), (88, 33975), (105, 34104), (108, 34140), (110, 34146), (115, 34158), (118, 34182), (125, 34200), (136, 34269),

Gene: Chaelin\_35 Start: 33655, Stop: 34041, Start Num: 65

Candidate Starts for Chaelin\_35:

(55, 33514), (Start: 59 @33550 has 1 MA's), (Start: 65 @33655 has 306 MA's), (70, 33694), (78, 33730), (80, 33733), (101, 33841), (106, 33868), (119, 33940), (131, 34000),

Gene: Chah\_36 Start: 33975, Stop: 34361, Start Num: 65

Candidate Starts for Chah\_36:

(55, 33834), (Start: 59 @33870 has 1 MA's), (Start: 65 @33975 has 306 MA's), (70, 34014), (78, 34050), (80, 34053), (101, 34161), (106, 34188), (119, 34260), (131, 34320),

Gene: Chalmers\_35 Start: 34647, Stop: 35072, Start Num: 66

Candidate Starts for Chalmers\_35:

(Start: 59 @34542 has 1 MA's), (Start: 66 @34647 has 69 MA's), (86, 34758), (88, 34767), (105, 34896), (108, 34932), (110, 34938), (115, 34950), (118, 34974), (125, 34992), (136, 35061),

Gene: Chandler\_35 Start: 34623, Stop: 35048, Start Num: 66

Candidate Starts for Chandler\_35:

(Start: 59 @34518 has 1 MA's), (Start: 66 @34623 has 69 MA's), (81, 34701), (86, 34734), (88, 34743), (101, 34851), (105, 34872), (108, 34908), (110, 34914), (115, 34926), (118, 34950), (125, 34968), (136, 35037),

Gene: Charles1\_35 Start: 33943, Stop: 34329, Start Num: 65

Candidate Starts for Charles1\_35:

(55, 33802), (Start: 59 @33838 has 1 MA's), (Start: 65 @33943 has 306 MA's), (70, 33982), (78, 34018), (80, 34021), (101, 34129), (106, 34156), (119, 34228), (131, 34288),

Gene: CharlieGBrown\_34 Start: 33533, Stop: 33919, Start Num: 65

Candidate Starts for CharlieGBrown\_34:

(55, 33392), (Start: 59 @33428 has 1 MA's), (Start: 65 @33533 has 306 MA's), (70, 33572), (78, 33608), (80, 33611), (101, 33719), (106, 33746), (119, 33818), (131, 33878),

Gene: CheetO\_35 Start: 33957, Stop: 34343, Start Num: 65

Candidate Starts for CheetO\_35:

(55, 33816), (Start: 59 @33852 has 1 MA's), (Start: 65 @33957 has 306 MA's), (70, 33996), (78, 34032), (80, 34035), (101, 34143), (106, 34170), (119, 34242), (131, 34302),

Gene: Chentzyk\_34 Start: 33713, Stop: 34138, Start Num: 66

Candidate Starts for Chentzyk\_34:

(Start: 59 @33608 has 1 MA's), (Start: 66 @33713 has 69 MA's), (81, 33791), (86, 33824), (88, 33833), (105, 33962), (108, 33998), (110, 34004), (115, 34016), (118, 34040), (125, 34058), (136, 34127),

Gene: Cher\_34 Start: 33680, Stop: 34066, Start Num: 65

Candidate Starts for Cher\_34:

(55, 33539), (Start: 59 @33575 has 1 MA's), (Start: 65 @33680 has 306 MA's), (70, 33719), (78, 33755), (80, 33758), (101, 33866), (106, 33893), (119, 33965), (131, 34025),

Gene: Childish\_34 Start: 33683, Stop: 34069, Start Num: 65

Candidate Starts for Childish\_34:

(55, 33542), (Start: 59 @33578 has 1 MA's), (Start: 65 @33683 has 306 MA's), (70, 33722), (78, 33758), (80, 33761), (101, 33869), (106, 33896), (119, 33968), (131, 34028),

Gene: Chipette\_36 Start: 34173, Stop: 34559, Start Num: 65

Candidate Starts for Chipette\_36:

(55, 34032), (Start: 59 @34068 has 1 MA's), (Start: 65 @34173 has 306 MA's), (70, 34212), (78, 34248), (80, 34251), (101, 34359), (106, 34386), (119, 34458), (131, 34518),

Gene: Chorkpop\_35 Start: 33679, Stop: 34065, Start Num: 65

Candidate Starts for Chorkpop\_35:

(55, 33538), (Start: 59 @33574 has 1 MA's), (Start: 65 @33679 has 306 MA's), (70, 33718), (78, 33754), (80, 33757), (101, 33865), (106, 33892), (119, 33964), (131, 34024),

Gene: ChrisnMich\_31 Start: 33140, Stop: 33493, Start Num: 67

Candidate Starts for ChrisnMich\_31:

(Start: 67 @33140 has 30 MA's), (70, 33161), (75, 33188), (96, 33290), (107, 33326), (123, 33407), (124, 33410), (135, 33473),

Gene: Chunky\_35 Start: 33966, Stop: 34352, Start Num: 65

Candidate Starts for Chunky\_35:

(55, 33825), (Start: 59 @33861 has 1 MA's), (Start: 65 @33966 has 306 MA's), (70, 34005), (78, 34041), (80, 34044), (101, 34152), (106, 34179), (119, 34251), (131, 34311),

Gene: Chute\_34 Start: 34004, Stop: 34390, Start Num: 65

Candidate Starts for Chute\_34:

(55, 33863), (Start: 59 @33899 has 1 MA's), (Start: 65 @34004 has 306 MA's), (70, 34043), (78, 34079), (80, 34082), (101, 34190), (106, 34217), (119, 34289), (131, 34349),

Gene: Cobra\_35 Start: 33964, Stop: 34350, Start Num: 65

Candidate Starts for Cobra\_35:

(55, 33823), (Start: 59 @33859 has 1 MA's), (Start: 65 @33964 has 306 MA's), (70, 34003), (78, 34039), (80, 34042), (101, 34150), (106, 34177), (119, 34249), (131, 34309),

Gene: Coffee\_35 Start: 34392, Stop: 34781, Start Num: 65

Candidate Starts for Coffee\_35:

(55, 34251), (Start: 59 @34287 has 1 MA's), (Start: 65 @34392 has 306 MA's), (70, 34431), (78, 34467), (92, 34542), (101, 34578), (106, 34605), (110, 34641), (119, 34677), (121, 34680), (131, 34737), (138, 34770),

Gene: Colbert\_35 Start: 34019, Stop: 34405, Start Num: 65

Candidate Starts for Colbert\_35:

(55, 33878), (Start: 59 @33914 has 1 MA's), (Start: 65 @34019 has 306 MA's), (70, 34058), (78, 34094), (80, 34097), (101, 34205), (106, 34232), (119, 34304), (131, 34364),

Gene: Coletti\_34 Start: 34004, Stop: 34390, Start Num: 65

Candidate Starts for Coletti\_34:

(55, 33863), (Start: 59 @33899 has 1 MA's), (Start: 65 @34004 has 306 MA's), (70, 34043), (78, 34079), (80, 34082), (101, 34190), (106, 34217), (119, 34289), (131, 34349),

Gene: Compostia\_36 Start: 34271, Stop: 34696, Start Num: 66

Candidate Starts for Compostia\_36:

(50, 33929), (52, 34040), (Start: 59 @34166 has 1 MA's), (Start: 66 @34271 has 69 MA's), (86, 34382), (88, 34391), (105, 34520), (107, 34529), (108, 34556), (110, 34562), (115, 34574), (118, 34598), (125, 34616), (136, 34685),

Gene: Cooper\_32 Start: 33361, Stop: 33711, Start Num: 67

Candidate Starts for Cooper\_32:

(Start: 67 @33361 has 30 MA's), (70, 33382), (75, 33409), (107, 33544), (123, 33625), (135, 33691),

Gene: Cornbread\_35 Start: 33755, Stop: 34066, Start Num: 78

Candidate Starts for Cornbread\_35:

(55, 33539), (Start: 59 @33575 has 1 MA's), (Start: 65 @33680 has 306 MA's), (70, 33719), (78, 33755), (80, 33758), (101, 33866), (106, 33893), (119, 33965), (131, 34025),

Gene: Cornobble\_34 Start: 33518, Stop: 33904, Start Num: 65

Candidate Starts for Cornobble\_34:

(55, 33377), (Start: 59 @33413 has 1 MA's), (Start: 65 @33518 has 306 MA's), (70, 33557), (78, 33593), (80, 33596), (101, 33704), (106, 33731), (119, 33803), (131, 33863),

Gene: Corofin\_35 Start: 33866, Stop: 34291, Start Num: 66

Candidate Starts for Corofin\_35:

(Start: 59 @33761 has 1 MA's), (Start: 66 @33866 has 69 MA's), (81, 33944), (86, 33977), (88, 33986), (105, 34115), (108, 34151), (110, 34157), (115, 34169), (118, 34193), (125, 34211), (136, 34280),

Gene: Cosmolli16\_34 Start: 33668, Stop: 34054, Start Num: 65

Candidate Starts for Cosmolli16\_34:

(55, 33527), (Start: 59 @33563 has 1 MA's), (Start: 65 @33668 has 306 MA's), (70, 33707), (78, 33743), (80, 33746), (101, 33854), (106, 33881), (119, 33953), (131, 34013),

Gene: Craff\_35 Start: 33961, Stop: 34347, Start Num: 65

Candidate Starts for Craff\_35:

(55, 33820), (Start: 59 @33856 has 1 MA's), (Start: 65 @33961 has 306 MA's), (70, 34000), (78, 34036), (80, 34039), (101, 34147), (106, 34174), (119, 34246), (131, 34306),

Gene: Crownjwl\_35 Start: 33734, Stop: 34120, Start Num: 65

Candidate Starts for Crownjwl\_35:

(55, 33593), (Start: 59 @33629 has 1 MA's), (Start: 65 @33734 has 306 MA's), (70, 33773), (78, 33809), (80, 33812), (101, 33920), (106, 33947), (119, 34019), (131, 34079),

Gene: D12\_27 Start: 31575, Stop: 31997, Start Num: 66

Candidate Starts for D12\_27:

(Start: 66 @31575 has 69 MA's), (70, 31605), (83, 31665), (88, 31692), (99, 31785), (101, 31800), (105, 31821), (108, 31857), (109, 31860), (110, 31863), (117, 31887), (120, 31902), (126, 31926),

Gene: DaddyDaniels\_35 Start: 33652, Stop: 34038, Start Num: 65

Candidate Starts for DaddyDaniels\_35:

(55, 33511), (Start: 59 @33547 has 1 MA's), (Start: 65 @33652 has 306 MA's), (70, 33691), (78, 33727), (80, 33730), (101, 33838), (106, 33865), (119, 33937), (131, 33997),

Gene: Daffy\_35 Start: 33683, Stop: 34069, Start Num: 65

Candidate Starts for Daffy\_35:

(55, 33542), (Start: 59 @33578 has 1 MA's), (Start: 65 @33683 has 306 MA's), (70, 33722), (78, 33758), (80, 33761), (101, 33869), (106, 33896), (119, 33968), (131, 34028),

Gene: Daisy\_35 Start: 33867, Stop: 34292, Start Num: 66

Candidate Starts for Daisy\_35:

(Start: 59 @33762 has 1 MA's), (Start: 66 @33867 has 69 MA's), (81, 33945), (86, 33978), (88, 33987), (101, 34095), (105, 34116), (107, 34125), (108, 34152), (110, 34158), (115, 34170), (118, 34194), (125, 34212), (136, 34281),

Gene: Daka\_35 Start: 33957, Stop: 34343, Start Num: 65

Candidate Starts for Daka\_35:

(55, 33816), (Start: 59 @33852 has 1 MA's), (Start: 65 @33957 has 306 MA's), (70, 33996), (78, 34032), (80, 34035), (101, 34143), (106, 34170), (119, 34242), (131, 34302),

Gene: Dati\_35 Start: 33677, Stop: 34063, Start Num: 65

Candidate Starts for Dati\_35:

(55, 33536), (Start: 59 @33572 has 1 MA's), (Start: 65 @33677 has 306 MA's), (70, 33716), (78, 33752), (80, 33755), (101, 33863), (106, 33890), (119, 33962), (131, 34022),

Gene: Deenasa\_35 Start: 34606, Stop: 35031, Start Num: 66

Candidate Starts for Deenasa\_35:

(Start: 59 @34501 has 1 MA's), (Start: 66 @34606 has 69 MA's), (81, 34684), (86, 34717), (88, 34726), (105, 34855), (108, 34891), (110, 34897), (115, 34909), (118, 34933), (125, 34951), (136, 35020),

Gene: DelRivs\_34 Start: 33678, Stop: 34064, Start Num: 65

Candidate Starts for DelRivs\_34:

(55, 33537), (Start: 59 @33573 has 1 MA's), (Start: 65 @33678 has 306 MA's), (70, 33717), (78, 33753), (80, 33756), (101, 33864), (106, 33891), (119, 33963), (131, 34023),

Gene: Derpp\_34 Start: 33522, Stop: 33908, Start Num: 65

Candidate Starts for Derpp\_34:

(55, 33381), (Start: 59 @33417 has 1 MA's), (Start: 65 @33522 has 306 MA's), (70, 33561), (78, 33597), (80, 33600), (101, 33708), (106, 33735), (119, 33807), (131, 33867),

Gene: Devonte\_35 Start: 33831, Stop: 34256, Start Num: 66

Candidate Starts for Devonte\_35:

(Start: 59 @33726 has 1 MA's), (Start: 66 @33831 has 69 MA's), (81, 33909), (86, 33942), (88, 33951), (101, 34059), (105, 34080), (108, 34116), (110, 34122), (115, 34134), (118, 34158), (125, 34176), (136, 34245),

Gene: Dice\_34 Start: 33657, Stop: 34043, Start Num: 65

Candidate Starts for Dice\_34:

(55, 33516), (Start: 59 @33552 has 1 MA's), (Start: 65 @33657 has 306 MA's), (70, 33696), (78, 33732), (80, 33735), (101, 33843), (106, 33870), (119, 33942), (131, 34002),

Gene: DigitDog\_34 Start: 34112, Stop: 34546, Start Num: 66

Candidate Starts for DigitDog\_34:

(54, 33929), (Start: 59 @34007 has 1 MA's), (Start: 66 @34112 has 69 MA's), (97, 34316), (101, 34346),

Gene: Dingo\_35 Start: 33940, Stop: 34326, Start Num: 65

Candidate Starts for Dingo\_35:

(55, 33799), (Start: 59 @33835 has 1 MA's), (Start: 65 @33940 has 306 MA's), (70, 33979), (78, 34015), (80, 34018), (101, 34126), (106, 34153), (119, 34225), (131, 34285),

Gene: Dione\_34 Start: 33662, Stop: 34048, Start Num: 65

Candidate Starts for Dione\_34:

(55, 33521), (Start: 59 @33557 has 1 MA's), (Start: 65 @33662 has 306 MA's), (70, 33701), (78, 33737), (80, 33740), (101, 33848), (106, 33875), (119, 33947), (131, 34007),

Gene: DirtJuice\_35 Start: 33946, Stop: 34332, Start Num: 65

Candidate Starts for DirtJuice\_35:

(55, 33805), (Start: 59 @33841 has 1 MA's), (Start: 65 @33946 has 306 MA's), (70, 33985), (78, 34021), (80, 34024), (101, 34132), (106, 34159), (119, 34231), (131, 34291),

Gene: Doddsville\_35 Start: 33676, Stop: 34062, Start Num: 65

Candidate Starts for Doddsville\_35:

(55, 33535), (Start: 59 @33571 has 1 MA's), (Start: 65 @33676 has 306 MA's), (70, 33715), (78, 33751), (80, 33754), (101, 33862), (106, 33889), (119, 33961), (131, 34021),

Gene: DoesntMatter\_35 Start: 33949, Stop: 34335, Start Num: 65

Candidate Starts for DoesntMatter\_35:

(55, 33808), (Start: 59 @33844 has 1 MA's), (Start: 65 @33949 has 306 MA's), (70, 33988), (78, 34024), (80, 34027), (101, 34135), (106, 34162), (119, 34234), (131, 34294),

Gene: DonSanchon\_34 Start: 33656, Stop: 34042, Start Num: 65

Candidate Starts for DonSanchon\_34:

(55, 33515), (Start: 59 @33551 has 1 MA's), (Start: 65 @33656 has 306 MA's), (70, 33695), (78, 33731), (80, 33734), (101, 33842), (106, 33869), (119, 33941), (131, 34001),

Gene: Donny\_34 Start: 34518, Stop: 34952, Start Num: 66

Candidate Starts for Donny\_34:

(54, 34341), (Start: 59 @34413 has 1 MA's), (Start: 66 @34518 has 69 MA's), (70, 34560), (71, 34572), (79, 34599), (92, 34695), (97, 34722), (101, 34752), (105, 34773), (107, 34782),

Gene: Dori\_31 Start: 30423, Stop: 30851, Start Num: 65

Candidate Starts for Dori\_31:

(Start: 59 @30318 has 1 MA's), (Start: 65 @30423 has 306 MA's), (110, 30714), (119, 30750),

Gene: DuchessDung\_33 Start: 32813, Stop: 33199, Start Num: 65

Candidate Starts for DuchessDung\_33:

(55, 32672), (Start: 59 @32708 has 1 MA's), (Start: 65 @32813 has 306 MA's), (70, 32852), (78, 32888), (80, 32891), (101, 32999), (106, 33026), (119, 33098), (131, 33158),

Gene: Duggie\_34 Start: 33678, Stop: 34064, Start Num: 65

Candidate Starts for Duggie\_34:

(55, 33537), (Start: 59 @33573 has 1 MA's), (Start: 65 @33678 has 306 MA's), (70, 33717), (78, 33753), (80, 33756), (101, 33864), (106, 33891), (119, 33963), (131, 34023),

Gene: Durga\_35 Start: 33976, Stop: 34362, Start Num: 65

Candidate Starts for Durga\_35:

(55, 33835), (Start: 59 @33871 has 1 MA's), (Start: 65 @33976 has 306 MA's), (70, 34015), (78, 34051), (80, 34054), (101, 34162), (106, 34189), (119, 34261), (131, 34321),

Gene: Eaglehorse\_35 Start: 34316, Stop: 34705, Start Num: 65

Candidate Starts for Eaglehorse\_35:

(55, 34175), (Start: 59 @34211 has 1 MA's), (Start: 65 @34316 has 306 MA's), (70, 34355), (78, 34391), (92, 34466), (101, 34502), (106, 34529), (110, 34565), (119, 34601), (121, 34604), (131,

34661), (138, 34694),

Gene: EastView9101\_33 Start: 34168, Stop: 34602, Start Num: 66

Candidate Starts for EastView9101\_33:

(54, 33991), (Start: 59 @34063 has 1 MA's), (Start: 66 @34168 has 69 MA's), (70, 34210), (71, 34222), (79, 34249), (92, 34345), (97, 34372), (101, 34402), (105, 34423), (107, 34432),

Gene: ElvisPhasley\_35 Start: 33998, Stop: 34384, Start Num: 65

Candidate Starts for ElvisPhasley\_35:

(55, 33857), (Start: 59 @33893 has 1 MA's), (Start: 65 @33998 has 306 MA's), (70, 34037), (78, 34073), (80, 34076), (101, 34184), (106, 34211), (119, 34283), (131, 34343),

Gene: Emiris\_35 Start: 33947, Stop: 34333, Start Num: 65

Candidate Starts for Emiris\_35:

(55, 33806), (Start: 59 @33842 has 1 MA's), (Start: 65 @33947 has 306 MA's), (70, 33986), (78, 34022), (80, 34025), (101, 34133), (106, 34160), (119, 34232), (131, 34292),

Gene: EmpTee\_35 Start: 33956, Stop: 34342, Start Num: 65

Candidate Starts for EmpTee\_35:

(55, 33815), (Start: 59 @33851 has 1 MA's), (Start: 65 @33956 has 306 MA's), (70, 33995), (78, 34031), (80, 34034), (101, 34142), (106, 34169), (119, 34241), (131, 34301),

Gene: Epah\_31 Start: 33148, Stop: 33501, Start Num: 67

Candidate Starts for Epah\_31:

(Start: 67 @33148 has 30 MA's), (70, 33169), (75, 33196), (96, 33298), (107, 33334), (123, 33415), (124, 33418), (135, 33481),

Gene: Eremos\_35 Start: 33955, Stop: 34341, Start Num: 65

Candidate Starts for Eremos\_35:

(55, 33814), (Start: 59 @33850 has 1 MA's), (Start: 65 @33955 has 306 MA's), (70, 33994), (78, 34030), (80, 34033), (101, 34141), (106, 34168), (119, 34240), (131, 34300),

Gene: Etaye\_35 Start: 33946, Stop: 34332, Start Num: 65

Candidate Starts for Etaye\_35:

(55, 33805), (Start: 59 @33841 has 1 MA's), (Start: 65 @33946 has 306 MA's), (70, 33985), (78, 34021), (80, 34024), (101, 34132), (106, 34159), (119, 34231), (131, 34291),

Gene: Eugenia\_35 Start: 33965, Stop: 34351, Start Num: 65

Candidate Starts for Eugenia\_35:

(55, 33824), (Start: 59 @33860 has 1 MA's), (Start: 65 @33965 has 306 MA's), (70, 34004), (78, 34040), (80, 34043), (101, 34151), (106, 34178), (119, 34250), (131, 34310),

Gene: Fanaw\_31 Start: 33845, Stop: 34198, Start Num: 67

Candidate Starts for Fanaw\_31:

(Start: 67 @33845 has 30 MA's), (70, 33866), (75, 33893), (96, 33995), (107, 34031), (123, 34112), (124, 34115), (135, 34178),

Gene: Fang\_35 Start: 33969, Stop: 34355, Start Num: 65

Candidate Starts for Fang\_35:

(55, 33828), (Start: 59 @33864 has 1 MA's), (Start: 65 @33969 has 306 MA's), (70, 34008), (78, 34044), (80, 34047), (101, 34155), (106, 34182), (119, 34254), (131, 34314),

Gene: Faze9\_35 Start: 34412, Stop: 34801, Start Num: 65

Candidate Starts for Faze9\_35:

(55, 34271), (Start: 59 @34307 has 1 MA's), (Start: 65 @34412 has 306 MA's), (70, 34451), (101, 34598), (106, 34625), (110, 34661), (119, 34697), (121, 34700), (131, 34757), (138, 34790),

Gene: FlagStaff\_25 Start: 24893, Stop: 25249, Start Num: 66

Candidate Starts for FlagStaff\_25:

(Start: 66 @24893 has 69 MA's), (68, 24911), (70, 24929), (71, 24941), (72, 24947), (73, 24950), (88, 24995), (105, 25073), (113, 25121), (116, 25124), (122, 25157),

Gene: FluffyNinja\_35 Start: 33962, Stop: 34348, Start Num: 65

Candidate Starts for FluffyNinja\_35:

(55, 33821), (Start: 59 @33857 has 1 MA's), (Start: 65 @33962 has 306 MA's), (70, 34001), (78, 34037), (80, 34040), (101, 34148), (106, 34175), (119, 34247), (131, 34307),

Gene: ForDig\_30 Start: 31687, Stop: 32067, Start Num: 65

Candidate Starts for ForDig\_30:

(Start: 65 @31687 has 306 MA's), (70, 31717), (71, 31729), (80, 31753), (89, 31798), (91, 31813), (101, 31867), (104, 31888), (110, 31933), (128, 32020), (131, 32029), (133, 32041), (136, 32056), (139, 32059),

Gene: Fortunato\_32 Start: 34173, Stop: 34526, Start Num: 67

Candidate Starts for Fortunato\_32:

(Start: 67 @34173 has 30 MA's), (70, 34194), (75, 34221), (96, 34323), (107, 34359), (123, 34440), (124, 34443), (135, 34506),

Gene: Fozzie\_34 Start: 33978, Stop: 34364, Start Num: 65

Candidate Starts for Fozzie\_34:

(55, 33837), (Start: 59 @33873 has 1 MA's), (Start: 65 @33978 has 306 MA's), (70, 34017), (78, 34053), (80, 34056), (101, 34164), (106, 34191), (119, 34263), (131, 34323),

Gene: Frankicide\_35 Start: 33974, Stop: 34360, Start Num: 65

Candidate Starts for Frankicide\_35:

(55, 33833), (Start: 59 @33869 has 1 MA's), (Start: 65 @33974 has 306 MA's), (70, 34013), (78, 34049), (80, 34052), (101, 34160), (106, 34187), (119, 34259), (131, 34319),

Gene: Frederick\_32 Start: 34179, Stop: 34532, Start Num: 67

Candidate Starts for Frederick\_32:

(Start: 67 @34179 has 30 MA's), (70, 34200), (75, 34227), (96, 34329), (107, 34365), (123, 34446), (124, 34449), (135, 34512),

Gene: FrenchFry\_35 Start: 34406, Stop: 34795, Start Num: 65

Candidate Starts for FrenchFry\_35:

(55, 34265), (Start: 59 @34301 has 1 MA's), (Start: 65 @34406 has 306 MA's), (70, 34445), (78, 34481), (92, 34556), (101, 34592), (106, 34619), (110, 34655), (119, 34691), (121, 34694), (131, 34751), (138, 34784),

Gene: Freya\_34 Start: 33653, Stop: 34039, Start Num: 65

Candidate Starts for Freya\_34:

(55, 33512), (Start: 59 @33548 has 1 MA's), (Start: 65 @33653 has 306 MA's), (70, 33692), (78, 33728), (80, 33731), (101, 33839), (106, 33866), (119, 33938), (131, 33998),

Gene: FriarPreacher\_35 Start: 33980, Stop: 34366, Start Num: 65

Candidate Starts for FriarPreacher\_35:



(55, 33839), (Start: 59 @33875 has 1 MA's), (Start: 65 @33980 has 306 MA's), (70, 34019), (78, 34055), (80, 34058), (101, 34166), (106, 34193), (119, 34265), (131, 34325),

Gene: Fringe\_35 Start: 33945, Stop: 34331, Start Num: 65

Candidate Starts for Fringe\_35:

(55, 33804), (Start: 59 @33840 has 1 MA's), (Start: 65 @33945 has 306 MA's), (70, 33984), (78, 34020), (80, 34023), (101, 34131), (106, 34158), (119, 34230), (131, 34290),

Gene: FugateOSU\_34 Start: 33658, Stop: 34044, Start Num: 65

Candidate Starts for FugateOSU\_34:

(55, 33517), (Start: 59 @33553 has 1 MA's), (Start: 65 @33658 has 306 MA's), (70, 33697), (78, 33733), (80, 33736), (101, 33844), (106, 33871), (119, 33943), (131, 34003),

Gene: Funsized\_37 Start: 36735, Stop: 37109, Start Num: 65

Candidate Starts for Funsized\_37:

(12, 35826), (13, 35841), (14, 35844), (15, 35868), (16, 35871), (18, 35910), (20, 35973), (21, 35976), (24, 36006), (26, 36105), (32, 36225), (33, 36234), (34, 36237), (39, 36252), (42, 36267), (44, 36276), (49, 36369), (53, 36510), (55, 36600), (Start: 59 @36630 has 1 MA's), (Start: 65 @36735 has 306 MA's), (74, 36801), (103, 36927), (108, 36963), (119, 37005), (123, 37017), (130, 37062), (131, 37065), (135, 37083), (137, 37095),

Gene: Gadget\_36 Start: 33854, Stop: 34279, Start Num: 66

Candidate Starts for Gadget\_36:

(Start: 59 @33749 has 1 MA's), (Start: 66 @33854 has 69 MA's), (81, 33932), (86, 33965), (88, 33974), (101, 34082), (105, 34103), (107, 34112), (108, 34139), (110, 34145), (115, 34157), (118, 34181), (125, 34199), (136, 34268),

Gene: Gareth\_34 Start: 33661, Stop: 34047, Start Num: 65

Candidate Starts for Gareth\_34:

(55, 33520), (Start: 59 @33556 has 1 MA's), (Start: 65 @33661 has 306 MA's), (70, 33700), (78, 33736), (80, 33739), (101, 33847), (106, 33874), (119, 33946), (131, 34006),

Gene: GeneCoco\_35 Start: 33970, Stop: 34356, Start Num: 65

Candidate Starts for GeneCoco\_35:

(55, 33829), (Start: 59 @33865 has 1 MA's), (Start: 65 @33970 has 306 MA's), (70, 34009), (78, 34045), (80, 34048), (101, 34156), (106, 34183), (119, 34255), (131, 34315),

Gene: Gervas\_35 Start: 33821, Stop: 34246, Start Num: 66

Candidate Starts for Gervas\_35:

(Start: 59 @33716 has 1 MA's), (Start: 66 @33821 has 69 MA's), (86, 33932), (88, 33941), (101, 34049), (105, 34070), (108, 34106), (110, 34112), (115, 34124), (118, 34148), (125, 34166), (136, 34235),

Gene: GinPorsche\_31 Start: 33148, Stop: 33501, Start Num: 67

Candidate Starts for GinPorsche\_31:

(Start: 67 @33148 has 30 MA's), (70, 33169), (75, 33196), (96, 33298), (107, 33334), (123, 33415), (124, 33418), (135, 33481),

Gene: Giraffe\_35 Start: 33664, Stop: 34050, Start Num: 65

Candidate Starts for Giraffe\_35:

(55, 33523), (Start: 59 @33559 has 1 MA's), (Start: 65 @33664 has 306 MA's), (70, 33703), (78, 33739), (80, 33742), (101, 33850), (106, 33877), (119, 33949), (131, 34009),

Gene: Glass\_35 Start: 34406, Stop: 34795, Start Num: 65

Candidate Starts for Glass\_35:

(55, 34265), (Start: 59 @34301 has 1 MA's), (Start: 65 @34406 has 306 MA's), (70, 34445), (78, 34481), (92, 34556), (101, 34592), (106, 34619), (110, 34655), (119, 34691), (121, 34694), (131, 34751), (138, 34784),

Gene: GlenHope\_36 Start: 33834, Stop: 34259, Start Num: 66

Candidate Starts for GlenHope\_36:

(50, 33492), (52, 33603), (Start: 59 @33729 has 1 MA's), (Start: 66 @33834 has 69 MA's), (86, 33945), (88, 33954), (105, 34083), (107, 34092), (108, 34119), (110, 34125), (115, 34137), (118, 34161), (125, 34179), (136, 34248),

Gene: Glubnar\_35 Start: 33833, Stop: 34258, Start Num: 66

Candidate Starts for Glubnar\_35:

(Start: 59 @33728 has 1 MA's), (Start: 66 @33833 has 69 MA's), (86, 33944), (88, 33953), (101, 34061), (105, 34082), (108, 34118), (110, 34124), (115, 34136), (118, 34160), (125, 34178), (136, 34247),

Gene: GodPhather\_28 Start: 31802, Stop: 32191, Start Num: 65

Candidate Starts for GodPhather\_28:

(55, 31661), (Start: 59 @31697 has 1 MA's), (Start: 65 @31802 has 306 MA's), (70, 31841), (101, 31988), (106, 32015), (110, 32051), (119, 32087), (121, 32090), (131, 32147), (138, 32180),

Gene: Godines\_35 Start: 34315, Stop: 34737, Start Num: 66

Candidate Starts for Godines\_35:

(30, 33775), (38, 33826), (46, 33865), (47, 33907), (54, 34138), (Start: 59 @34210 has 1 MA's), (Start: 66 @34315 has 69 MA's), (70, 34345), (83, 34405), (99, 34525), (101, 34540), (105, 34561), (107, 34570), (110, 34603), (117, 34627), (136, 34726),

Gene: Gophee\_35 Start: 33947, Stop: 34333, Start Num: 65

Candidate Starts for Gophee\_35:

(55, 33806), (Start: 59 @33842 has 1 MA's), (Start: 65 @33947 has 306 MA's), (70, 33986), (78, 34022), (80, 34025), (101, 34133), (106, 34160), (119, 34232), (131, 34292),

Gene: Grand2040\_34 Start: 33679, Stop: 34065, Start Num: 65

Candidate Starts for Grand2040\_34:

(55, 33538), (Start: 59 @33574 has 1 MA's), (Start: 65 @33679 has 306 MA's), (70, 33718), (78, 33754), (80, 33757), (101, 33865), (106, 33892), (119, 33964), (131, 34024),

Gene: Gwennie1\_35 Start: 34028, Stop: 34414, Start Num: 65

Candidate Starts for Gwennie1\_35:

(55, 33887), (Start: 59 @33923 has 1 MA's), (Start: 65 @34028 has 306 MA's), (70, 34067), (78, 34103), (80, 34106), (101, 34214), (106, 34241), (119, 34313), (131, 34373),

Gene: Gwilliam\_35 Start: 33959, Stop: 34345, Start Num: 65

Candidate Starts for Gwilliam\_35:

(55, 33818), (Start: 59 @33854 has 1 MA's), (Start: 65 @33959 has 306 MA's), (70, 33998), (78, 34034), (80, 34037), (101, 34145), (106, 34172), (119, 34244), (131, 34304),

Gene: Gyarad\_0035 Start: 33961, Stop: 34347, Start Num: 65

Candidate Starts for Gyarad\_0035:

(55, 33820), (Start: 59 @33856 has 1 MA's), (Start: 65 @33961 has 306 MA's), (70, 34000), (78, 34036), (80, 34039), (101, 34147), (106, 34174), (119, 34246), (131, 34306),

Gene: HSavage\_35 Start: 33965, Stop: 34351, Start Num: 65

Candidate Starts for HSavage\_35:

(55, 33824), (Start: 59 @33860 has 1 MA's), (Start: 65 @33965 has 306 MA's), (70, 34004), (78, 34040), (80, 34043), (101, 34151), (106, 34178), (119, 34250), (131, 34310),

Gene: Haimas\_35 Start: 33956, Stop: 34342, Start Num: 65

Candidate Starts for Haimas\_35:

(55, 33815), (Start: 59 @33851 has 1 MA's), (Start: 65 @33956 has 306 MA's), (70, 33995), (78, 34031), (80, 34034), (101, 34142), (106, 34169), (119, 34241), (131, 34301),

Gene: Haleema\_34 Start: 33679, Stop: 34065, Start Num: 65

Candidate Starts for Haleema\_34:

(55, 33538), (Start: 59 @33574 has 1 MA's), (Start: 65 @33679 has 306 MA's), (70, 33718), (78, 33754), (80, 33757), (101, 33865), (106, 33892), (119, 33964), (131, 34024),

Gene: Halfpint\_34 Start: 33660, Stop: 34085, Start Num: 66

Candidate Starts for Halfpint\_34:

(50, 33318), (52, 33429), (Start: 59 @33555 has 1 MA's), (Start: 66 @33660 has 69 MA's), (86, 33771), (88, 33780), (105, 33909), (108, 33945), (110, 33951), (115, 33963), (118, 33987), (125, 34005), (136, 34074),

Gene: Hally898\_31 Start: 33160, Stop: 33513, Start Num: 67

Candidate Starts for Hally898\_31:

(Start: 67 @33160 has 30 MA's), (70, 33181), (75, 33208), (96, 33310), (107, 33346), (123, 33427), (124, 33430), (135, 33493),

Gene: Hamish\_35 Start: 33948, Stop: 34334, Start Num: 65

Candidate Starts for Hamish\_35:

(55, 33807), (Start: 59 @33843 has 1 MA's), (Start: 65 @33948 has 306 MA's), (70, 33987), (78, 34023), (80, 34026), (101, 34134), (106, 34161), (119, 34233), (131, 34293),

Gene: Hangman\_32 Start: 34171, Stop: 34524, Start Num: 67

Candidate Starts for Hangman\_32:

(Start: 67 @34171 has 30 MA's), (70, 34192), (75, 34219), (96, 34321), (107, 34357), (123, 34438), (124, 34441), (135, 34504),

Gene: Hartsy\_35 Start: 33999, Stop: 34385, Start Num: 65

Candidate Starts for Hartsy\_35:

(55, 33858), (Start: 59 @33894 has 1 MA's), (Start: 65 @33999 has 306 MA's), (70, 34038), (78, 34074), (80, 34077), (101, 34185), (106, 34212), (119, 34284), (131, 34344),

Gene: Harvey\_35 Start: 33974, Stop: 34360, Start Num: 65

Candidate Starts for Harvey\_35:

(55, 33833), (Start: 59 @33869 has 1 MA's), (Start: 65 @33974 has 306 MA's), (70, 34013), (78, 34049), (80, 34052), (101, 34160), (106, 34187), (119, 34259), (131, 34319),

Gene: HarveySr\_35 Start: 33827, Stop: 34252, Start Num: 66

Candidate Starts for HarveySr\_35:

(Start: 59 @33722 has 1 MA's), (Start: 66 @33827 has 69 MA's), (81, 33905), (86, 33938), (88, 33947), (101, 34055), (105, 34076), (107, 34085), (108, 34112), (110, 34118), (115, 34130), (118, 34154), (125, 34172), (136, 34241),

Gene: Hashim76\_38 Start: 33076, Stop: 33447, Start Num: 64  
Candidate Starts for Hashim76\_38:  
(Start: 64 @33076 has 2 MA's), (114, 33316), (123, 33355), (124, 33358),

Gene: Heath\_31 Start: 33778, Stop: 34131, Start Num: 67  
Candidate Starts for Heath\_31:  
(Start: 67 @33778 has 30 MA's), (70, 33799), (75, 33826), (107, 33964), (108, 33991), (123, 34045),  
(124, 34048), (135, 34111),

Gene: Heathcliff\_35 Start: 33805, Stop: 34230, Start Num: 66  
Candidate Starts for Heathcliff\_35:  
(Start: 59 @33700 has 1 MA's), (Start: 66 @33805 has 69 MA's), (81, 33883), (86, 33916), (88, 33925),  
(105, 34054), (108, 34090), (110, 34096), (115, 34108), (118, 34132), (125, 34150), (136, 34219),

Gene: Hedgerow\_35 Start: 34388, Stop: 34777, Start Num: 65  
Candidate Starts for Hedgerow\_35:  
(55, 34247), (Start: 59 @34283 has 1 MA's), (Start: 65 @34388 has 306 MA's), (70, 34427), (78,  
34463), (92, 34538), (101, 34574), (106, 34601), (110, 34637), (119, 34673), (121, 34676), (131,  
34733), (138, 34766),

Gene: Held\_35 Start: 33663, Stop: 34049, Start Num: 65  
Candidate Starts for Held\_35:  
(55, 33522), (Start: 59 @33558 has 1 MA's), (Start: 65 @33663 has 306 MA's), (70, 33702), (78,  
33738), (80, 33741), (101, 33849), (106, 33876), (119, 33948), (131, 34008),

Gene: HenryJackson\_34 Start: 33679, Stop: 34065, Start Num: 65  
Candidate Starts for HenryJackson\_34:  
(55, 33538), (Start: 59 @33574 has 1 MA's), (Start: 65 @33679 has 306 MA's), (70, 33718), (78,  
33754), (80, 33757), (101, 33865), (106, 33892), (119, 33964), (131, 34024),

Gene: Hertubise\_35 Start: 33970, Stop: 34356, Start Num: 65  
Candidate Starts for Hertubise\_35:  
(55, 33829), (Start: 59 @33865 has 1 MA's), (Start: 65 @33970 has 306 MA's), (70, 34009), (78,  
34045), (80, 34048), (101, 34156), (106, 34183), (119, 34255), (131, 34315),

Gene: Hetaeria\_35 Start: 33972, Stop: 34358, Start Num: 65  
Candidate Starts for Hetaeria\_35:  
(55, 33831), (Start: 59 @33867 has 1 MA's), (Start: 65 @33972 has 306 MA's), (70, 34011), (78,  
34047), (80, 34050), (101, 34158), (106, 34185), (119, 34257), (131, 34317),

Gene: HighStump\_34 Start: 33662, Stop: 34048, Start Num: 65  
Candidate Starts for HighStump\_34:  
(55, 33521), (Start: 59 @33557 has 1 MA's), (Start: 65 @33662 has 306 MA's), (70, 33701), (78,  
33737), (80, 33740), (101, 33848), (106, 33875), (119, 33947), (131, 34007),

Gene: Hocus\_34 Start: 33671, Stop: 34057, Start Num: 65  
Candidate Starts for Hocus\_34:  
(55, 33530), (Start: 59 @33566 has 1 MA's), (Start: 65 @33671 has 306 MA's), (70, 33710), (78,  
33746), (80, 33749), (101, 33857), (106, 33884), (119, 33956), (131, 34016),

Gene: Holeinone\_35 Start: 34268, Stop: 34657, Start Num: 65  
Candidate Starts for Holeinone\_35:

(55, 34127), (Start: 59 @34163 has 1 MA's), (Start: 65 @34268 has 306 MA's), (70, 34307), (78, 34343), (92, 34418), (101, 34454), (106, 34481), (110, 34517), (119, 34553), (121, 34556), (131, 34613), (138, 34646),

Gene: Horchata\_35 Start: 33950, Stop: 34336, Start Num: 65

Candidate Starts for Horchata\_35:

(55, 33809), (Start: 59 @33845 has 1 MA's), (Start: 65 @33950 has 306 MA's), (70, 33989), (78, 34025), (80, 34028), (101, 34136), (106, 34163), (119, 34235), (131, 34295),

Gene: Hosp\_027 Start: 29891, Stop: 30271, Start Num: 65

Candidate Starts for Hosp\_027:

(Start: 65 @29891 has 306 MA's), (70, 29921), (71, 29933), (80, 29957), (89, 30002), (91, 30017), (101, 30071), (104, 30092), (110, 30137), (128, 30224), (131, 30233), (133, 30245), (136, 30260), (139, 30263),

Gene: Hydro\_32 Start: 34188, Stop: 34541, Start Num: 67

Candidate Starts for Hydro\_32:

(Start: 67 @34188 has 30 MA's), (70, 34209), (75, 34236), (96, 34338), (107, 34374), (123, 34455), (124, 34458), (135, 34521),

Gene: ImtiyazSitla\_34 Start: 33513, Stop: 33899, Start Num: 65

Candidate Starts for ImtiyazSitla\_34:

(55, 33372), (Start: 59 @33408 has 1 MA's), (Start: 65 @33513 has 306 MA's), (70, 33552), (78, 33588), (80, 33591), (101, 33699), (106, 33726), (119, 33798), (131, 33858),

Gene: Imvubu\_28 Start: 30831, Stop: 31232, Start Num: 62

Candidate Starts for Imvubu\_28:

(Start: 62 @30831 has 2 MA's), (84, 30945), (95, 30999), (101, 31020), (107, 31050), (109, 31080), (114, 31092), (121, 31122), (127, 31161), (132, 31185),

Gene: Inchworm\_35 Start: 33948, Stop: 34334, Start Num: 65

Candidate Starts for Inchworm\_35:

(55, 33807), (Start: 59 @33843 has 1 MA's), (Start: 65 @33948 has 306 MA's), (70, 33987), (78, 34023), (80, 34026), (101, 34134), (106, 34161), (119, 34233), (131, 34293),

Gene: Indlovu\_32 Start: 33079, Stop: 33447, Start Num: 67

Candidate Starts for Indlovu\_32:

(61, 33013), (Start: 67 @33079 has 30 MA's), (83, 33151), (121, 33343), (127, 33382), (134, 33415),

Gene: Inverness\_35 Start: 33962, Stop: 34348, Start Num: 65

Candidate Starts for Inverness\_35:

(55, 33821), (Start: 59 @33857 has 1 MA's), (Start: 65 @33962 has 306 MA's), (70, 34001), (78, 34037), (80, 34040), (101, 34148), (106, 34175), (119, 34247), (131, 34307),

Gene: Iridessa\_35 Start: 33664, Stop: 34050, Start Num: 65

Candidate Starts for Iridessa\_35:

(55, 33523), (Start: 59 @33559 has 1 MA's), (Start: 65 @33664 has 306 MA's), (70, 33703), (78, 33739), (80, 33742), (101, 33850), (106, 33877), (119, 33949), (131, 34009),

Gene: Iridoclysis\_35 Start: 33942, Stop: 34328, Start Num: 65

Candidate Starts for Iridoclysis\_35:

(55, 33801), (Start: 59 @33837 has 1 MA's), (Start: 65 @33942 has 306 MA's), (70, 33981), (78, 34017), (80, 34020), (101, 34128), (106, 34155), (119, 34227), (131, 34287),

Gene: IsaacEli\_35 Start: 33966, Stop: 34352, Start Num: 65

Candidate Starts for IsaacEli\_35:

(55, 33825), (Start: 59 @33861 has 1 MA's), (Start: 65 @33966 has 306 MA's), (70, 34005), (78, 34041), (80, 34044), (101, 34152), (106, 34179), (119, 34251), (131, 34311),

Gene: ItsyBitsy1\_35 Start: 34270, Stop: 34659, Start Num: 65

Candidate Starts for ItsyBitsy1\_35:

(55, 34129), (Start: 59 @34165 has 1 MA's), (Start: 65 @34270 has 306 MA's), (70, 34309), (78, 34345), (92, 34420), (101, 34456), (106, 34483), (110, 34519), (119, 34555), (121, 34558), (131, 34615), (138, 34648),

Gene: JAMaL\_32 Start: 34359, Stop: 34712, Start Num: 67

Candidate Starts for JAMaL\_32:

(Start: 67 @34359 has 30 MA's), (70, 34380), (75, 34407), (96, 34509), (107, 34545), (123, 34626), (124, 34629), (135, 34692),

Gene: JDog\_34 Start: 33679, Stop: 34065, Start Num: 65

Candidate Starts for JDog\_34:

(55, 33538), (Start: 59 @33574 has 1 MA's), (Start: 65 @33679 has 306 MA's), (70, 33718), (78, 33754), (80, 33757), (101, 33865), (106, 33892), (119, 33964), (131, 34024),

Gene: JacAttac\_35 Start: 33948, Stop: 34334, Start Num: 65

Candidate Starts for JacAttac\_35:

(55, 33807), (Start: 59 @33843 has 1 MA's), (Start: 65 @33948 has 306 MA's), (70, 33987), (78, 34023), (80, 34026), (101, 34134), (106, 34161), (119, 34233), (131, 34293),

Gene: Jackstina\_32 Start: 33764, Stop: 34189, Start Num: 66

Candidate Starts for Jackstina\_32:

(50, 33422), (52, 33533), (Start: 59 @33659 has 1 MA's), (Start: 66 @33764 has 69 MA's), (86, 33875), (88, 33884), (105, 34013), (107, 34022), (108, 34049), (110, 34055), (115, 34067), (118, 34091), (125, 34109), (136, 34178),

Gene: JaguarMi\_32 Start: 33653, Stop: 34006, Start Num: 67

Candidate Starts for JaguarMi\_32:

(Start: 67 @33653 has 30 MA's), (70, 33674), (75, 33701), (96, 33803), (107, 33839), (123, 33920), (124, 33923), (135, 33986),

Gene: JakeO\_34 Start: 33681, Stop: 34067, Start Num: 65

Candidate Starts for JakeO\_34:

(55, 33540), (Start: 59 @33576 has 1 MA's), (Start: 65 @33681 has 306 MA's), (70, 33720), (78, 33756), (80, 33759), (101, 33867), (106, 33894), (119, 33966), (131, 34026),

Gene: JangoPhett\_35 Start: 33950, Stop: 34336, Start Num: 65

Candidate Starts for JangoPhett\_35:

(55, 33809), (Start: 59 @33845 has 1 MA's), (Start: 65 @33950 has 306 MA's), (70, 33989), (78, 34025), (80, 34028), (101, 34136), (106, 34163), (119, 34235), (131, 34295),

Gene: Jeon\_27 Start: 31544, Stop: 31933, Start Num: 65

Candidate Starts for Jeon\_27:

(55, 31403), (Start: 59 @31439 has 1 MA's), (Start: 65 @31544 has 306 MA's), (70, 31583), (101, 31730), (106, 31757), (110, 31793), (119, 31829), (121, 31832), (131, 31889), (138, 31922),

Gene: Jesabah\_35 Start: 33681, Stop: 34067, Start Num: 65

Candidate Starts for Jesabah\_35:

(55, 33540), (Start: 59 @33576 has 1 MA's), (Start: 65 @33681 has 306 MA's), (70, 33720), (78, 33756), (80, 33759), (101, 33867), (106, 33894), (119, 33966), (131, 34026),

Gene: Jillium\_34 Start: 33672, Stop: 34058, Start Num: 65

Candidate Starts for Jillium\_34:

(55, 33531), (Start: 59 @33567 has 1 MA's), (Start: 65 @33672 has 306 MA's), (70, 33711), (78, 33747), (80, 33750), (101, 33858), (106, 33885), (119, 33957), (131, 34017),

Gene: Jiminy\_34 Start: 33516, Stop: 33902, Start Num: 65

Candidate Starts for Jiminy\_34:

(55, 33375), (Start: 59 @33411 has 1 MA's), (Start: 65 @33516 has 306 MA's), (70, 33555), (78, 33591), (80, 33594), (101, 33702), (106, 33729), (119, 33801), (131, 33861),

Gene: Jiraiya\_34 Start: 33669, Stop: 34055, Start Num: 65

Candidate Starts for Jiraiya\_34:

(55, 33528), (Start: 59 @33564 has 1 MA's), (Start: 65 @33669 has 306 MA's), (70, 33708), (78, 33744), (80, 33747), (101, 33855), (106, 33882), (119, 33954), (131, 34014),

Gene: Jolie1\_029 Start: 31678, Stop: 32058, Start Num: 65

Candidate Starts for Jolie1\_029:

(Start: 65 @31678 has 306 MA's), (70, 31708), (71, 31720), (80, 31744), (89, 31789), (91, 31804), (101, 31858), (104, 31879), (110, 31924), (128, 32011), (131, 32020), (133, 32032), (136, 32047), (139, 32050),

Gene: KLucky39\_35 Start: 33960, Stop: 34346, Start Num: 65

Candidate Starts for KLucky39\_35:

(55, 33819), (Start: 59 @33855 has 1 MA's), (Start: 65 @33960 has 306 MA's), (70, 33999), (78, 34035), (80, 34038), (101, 34146), (106, 34173), (119, 34245), (131, 34305),

Gene: Kahve\_34 Start: 33676, Stop: 34062, Start Num: 65

Candidate Starts for Kahve\_34:

(55, 33535), (Start: 59 @33571 has 1 MA's), (Start: 65 @33676 has 306 MA's), (70, 33715), (78, 33751), (80, 33754), (101, 33862), (106, 33889), (119, 33961), (131, 34021),

Gene: Kailash\_35 Start: 34014, Stop: 34400, Start Num: 65

Candidate Starts for Kailash\_35:

(55, 33873), (Start: 59 @33909 has 1 MA's), (Start: 65 @34014 has 306 MA's), (70, 34053), (78, 34089), (80, 34092), (101, 34200), (106, 34227), (119, 34299), (131, 34359),

Gene: Kaleb\_35 Start: 34478, Stop: 34792, Start Num: 78

Candidate Starts for Kaleb\_35:

(55, 34262), (Start: 59 @34298 has 1 MA's), (Start: 65 @34403 has 306 MA's), (70, 34442), (78, 34478), (92, 34553), (101, 34589), (106, 34616), (110, 34652), (119, 34688), (121, 34691), (131, 34748), (138, 34781),

Gene: Kamiyu\_35 Start: 33813, Stop: 34238, Start Num: 66

Candidate Starts for Kamiyu\_35:

(Start: 59 @33708 has 1 MA's), (Start: 66 @33813 has 69 MA's), (81, 33891), (86, 33924), (88, 33933), (101, 34041), (105, 34062), (107, 34071), (108, 34098), (110, 34104), (115, 34116), (118, 34140), (125, 34158), (136, 34227),

Gene: KarasumaRum\_36 Start: 34667, Stop: 35101, Start Num: 66

Candidate Starts for KarasumaRum\_36:

(54, 34484), (Start: 59 @34562 has 1 MA's), (Start: 66 @34667 has 69 MA's), (97, 34871), (101, 34901),

Gene: Katniss\_35 Start: 33975, Stop: 34361, Start Num: 65

Candidate Starts for Katniss\_35:

(55, 33834), (Start: 59 @33870 has 1 MA's), (Start: 65 @33975 has 306 MA's), (70, 34014), (78, 34050), (80, 34053), (101, 34161), (106, 34188), (119, 34260), (131, 34320),

Gene: KayaCho\_29 Start: 31674, Stop: 32054, Start Num: 65

Candidate Starts for KayaCho\_29:

(Start: 65 @31674 has 306 MA's), (70, 31704), (71, 31716), (80, 31740), (89, 31785), (91, 31800), (101, 31854), (104, 31875), (110, 31920), (128, 32007), (131, 32016), (133, 32028), (136, 32043), (139, 32046),

Gene: Keitherie\_35 Start: 34013, Stop: 34399, Start Num: 65

Candidate Starts for Keitherie\_35:

(55, 33872), (Start: 59 @33908 has 1 MA's), (Start: 65 @34013 has 306 MA's), (70, 34052), (78, 34088), (80, 34091), (101, 34199), (106, 34226), (119, 34298), (131, 34358),

Gene: Khan1\_35 Start: 33697, Stop: 34083, Start Num: 65

Candidate Starts for Khan1\_35:

(55, 33556), (Start: 59 @33592 has 1 MA's), (Start: 65 @33697 has 306 MA's), (70, 33736), (78, 33772), (80, 33775), (101, 33883), (106, 33910), (119, 33982), (131, 34042),

Gene: Kheth\_35 Start: 34291, Stop: 34680, Start Num: 65

Candidate Starts for Kheth\_35:

(55, 34150), (Start: 59 @34186 has 1 MA's), (Start: 65 @34291 has 306 MA's), (70, 34330), (78, 34366), (92, 34441), (101, 34477), (106, 34504), (110, 34540), (119, 34576), (121, 34579), (131, 34636), (138, 34669),

Gene: Kikipoo\_35 Start: 33966, Stop: 34352, Start Num: 65

Candidate Starts for Kikipoo\_35:

(55, 33825), (Start: 59 @33861 has 1 MA's), (Start: 65 @33966 has 306 MA's), (70, 34005), (78, 34041), (80, 34044), (101, 34152), (106, 34179), (119, 34251), (131, 34311),

Gene: Kimbrough\_35 Start: 33668, Stop: 34054, Start Num: 65

Candidate Starts for Kimbrough\_35:

(55, 33527), (Start: 59 @33563 has 1 MA's), (Start: 65 @33668 has 306 MA's), (70, 33707), (78, 33743), (80, 33746), (101, 33854), (106, 33881), (119, 33953), (131, 34013),

Gene: KingTut\_26 Start: 29337, Stop: 29723, Start Num: 65

Candidate Starts for KingTut\_26:

(55, 29196), (Start: 59 @29232 has 1 MA's), (Start: 65 @29337 has 306 MA's), (70, 29376), (78, 29412), (80, 29415), (101, 29523), (106, 29550), (119, 29622), (131, 29682),

Gene: KingVeVeVe\_35 Start: 33941, Stop: 34327, Start Num: 65

Candidate Starts for KingVeVeVe\_35:

(55, 33800), (Start: 59 @33836 has 1 MA's), (Start: 65 @33941 has 306 MA's), (70, 33980), (78, 34016), (80, 34019), (101, 34127), (106, 34154), (119, 34226), (131, 34286),

Gene: KlimbOn\_35 Start: 33954, Stop: 34340, Start Num: 65



Candidate Starts for KlimbOn\_35:

(55, 33813), (Start: 59 @33849 has 1 MA's), (Start: 65 @33954 has 306 MA's), (70, 33993), (78, 34029), (80, 34032), (101, 34140), (106, 34167), (119, 34239), (131, 34299),

Gene: Kloppinator\_35 Start: 33977, Stop: 34363, Start Num: 65

Candidate Starts for Kloppinator\_35:

(55, 33836), (Start: 59 @33872 has 1 MA's), (Start: 65 @33977 has 306 MA's), (70, 34016), (78, 34052), (80, 34055), (101, 34163), (106, 34190), (119, 34262), (131, 34322),

Gene: Knocker\_36 Start: 35775, Stop: 36188, Start Num: 62

Candidate Starts for Knocker\_36:

(Start: 62 @35775 has 2 MA's), (63, 35781), (71, 35853), (77, 35877), (84, 35901), (95, 35955), (101, 35976), (107, 36006), (114, 36048), (121, 36078), (124, 36090), (127, 36117),

Gene: Kolhan\_35 Start: 34282, Stop: 34671, Start Num: 65

Candidate Starts for Kolhan\_35:

(55, 34141), (Start: 59 @34177 has 1 MA's), (Start: 65 @34282 has 306 MA's), (70, 34321), (78, 34357), (92, 34432), (101, 34468), (106, 34495), (110, 34531), (119, 34567), (121, 34570), (131, 34627), (138, 34660),

Gene: Kronus\_34 Start: 34423, Stop: 34848, Start Num: 66

Candidate Starts for Kronus\_34:

(Start: 59 @34318 has 1 MA's), (Start: 66 @34423 has 69 MA's), (86, 34534), (88, 34543), (101, 34651), (105, 34672), (108, 34708), (110, 34714), (115, 34726), (118, 34750), (125, 34768), (136, 34837),

Gene: Kwadwo\_34 Start: 33658, Stop: 34044, Start Num: 65

Candidate Starts for Kwadwo\_34:

(55, 33517), (Start: 59 @33553 has 1 MA's), (Start: 65 @33658 has 306 MA's), (70, 33697), (78, 33733), (80, 33736), (101, 33844), (106, 33871), (119, 33943), (131, 34003),

Gene: Kwksand96\_34 Start: 33527, Stop: 33913, Start Num: 65

Candidate Starts for Kwksand96\_34:

(55, 33386), (Start: 59 @33422 has 1 MA's), (Start: 65 @33527 has 306 MA's), (70, 33566), (78, 33602), (80, 33605), (101, 33713), (106, 33740), (119, 33812), (131, 33872),

Gene: Labeouficaum\_34 Start: 33522, Stop: 33908, Start Num: 65

Candidate Starts for Labeouficaum\_34:

(55, 33381), (Start: 59 @33417 has 1 MA's), (Start: 65 @33522 has 306 MA's), (70, 33561), (78, 33597), (80, 33600), (101, 33708), (106, 33735), (119, 33807), (131, 33867),

Gene: Lambano\_31 Start: 33160, Stop: 33513, Start Num: 67

Candidate Starts for Lambano\_31:

(Start: 67 @33160 has 30 MA's), (70, 33181), (75, 33208), (96, 33310), (107, 33346), (123, 33427), (124, 33430), (135, 33493),

Gene: Lars\_35 Start: 34393, Stop: 34782, Start Num: 65

Candidate Starts for Lars\_35:

(55, 34252), (Start: 59 @34288 has 1 MA's), (Start: 65 @34393 has 306 MA's), (70, 34432), (78, 34468), (92, 34543), (101, 34579), (106, 34606), (110, 34642), (119, 34678), (121, 34681), (131, 34738), (138, 34771),

Gene: LasagnaCat\_35 Start: 33960, Stop: 34346, Start Num: 65

Candidate Starts for LasagnaCat\_35:

(55, 33819), (Start: 59 @33855 has 1 MA's), (Start: 65 @33960 has 306 MA's), (70, 33999), (78, 34035), (80, 34038), (101, 34146), (106, 34173), (119, 34245), (131, 34305),

Gene: Lasso\_35 Start: 33933, Stop: 34319, Start Num: 65

Candidate Starts for Lasso\_35:

(55, 33792), (Start: 59 @33828 has 1 MA's), (Start: 65 @33933 has 306 MA's), (70, 33972), (78, 34008), (80, 34011), (101, 34119), (106, 34146), (119, 34218), (131, 34278),

Gene: Laurie\_35 Start: 33756, Stop: 34178, Start Num: 66

Candidate Starts for Laurie\_35:

(Start: 66 @33756 has 69 MA's), (70, 33786), (83, 33846), (95, 33939), (99, 33966), (101, 33981), (105, 34002), (107, 34011), (110, 34044), (117, 34068), (136, 34167),

Gene: LeeLot\_35 Start: 33964, Stop: 34350, Start Num: 65

Candidate Starts for LeeLot\_35:

(55, 33823), (Start: 59 @33859 has 1 MA's), (Start: 65 @33964 has 306 MA's), (70, 34003), (78, 34039), (80, 34042), (101, 34150), (106, 34177), (119, 34249), (131, 34309),

Gene: Lego3393\_35 Start: 33969, Stop: 34355, Start Num: 65

Candidate Starts for Lego3393\_35:

(55, 33828), (Start: 59 @33864 has 1 MA's), (Start: 65 @33969 has 306 MA's), (70, 34008), (78, 34044), (80, 34047), (101, 34155), (106, 34182), (119, 34254), (131, 34314),

Gene: Legolas\_34 Start: 33674, Stop: 34060, Start Num: 65

Candidate Starts for Legolas\_34:

(55, 33533), (Start: 59 @33569 has 1 MA's), (Start: 65 @33674 has 306 MA's), (70, 33713), (78, 33749), (80, 33752), (101, 33860), (106, 33887), (119, 33959), (131, 34019),

Gene: LeiMonet\_35 Start: 33665, Stop: 34051, Start Num: 65

Candidate Starts for LeiMonet\_35:

(55, 33524), (Start: 59 @33560 has 1 MA's), (Start: 65 @33665 has 306 MA's), (70, 33704), (78, 33740), (80, 33743), (101, 33851), (106, 33878), (119, 33950), (131, 34010),

Gene: LemonSlice\_35 Start: 33661, Stop: 34047, Start Num: 65

Candidate Starts for LemonSlice\_35:

(55, 33520), (Start: 59 @33556 has 1 MA's), (Start: 65 @33661 has 306 MA's), (70, 33700), (78, 33736), (80, 33739), (101, 33847), (106, 33874), (119, 33946), (131, 34006),

Gene: Lephleur\_35 Start: 34286, Stop: 34675, Start Num: 65

Candidate Starts for Lephleur\_35:

(55, 34145), (Start: 59 @34181 has 1 MA's), (Start: 65 @34286 has 306 MA's), (70, 34325), (78, 34361), (92, 34436), (101, 34472), (106, 34499), (110, 34535), (119, 34571), (121, 34574), (131, 34631), (138, 34664),

Gene: LestyG\_35 Start: 33844, Stop: 34269, Start Num: 66

Candidate Starts for LestyG\_35:

(Start: 59 @33739 has 1 MA's), (Start: 66 @33844 has 69 MA's), (86, 33955), (88, 33964), (101, 34072), (105, 34093), (108, 34129), (110, 34135), (115, 34147), (118, 34171), (125, 34189), (136, 34258),

Gene: LilMcDreamy\_30 Start: 33312, Stop: 33695, Start Num: 65

Candidate Starts for LilMcDreamy\_30:

(Start: 65 @33312 has 306 MA's), (70, 33342), (71, 33354), (80, 33378), (89, 33423), (91, 33438), (100, 33489), (101, 33492), (104, 33513), (106, 33522), (110, 33558), (127, 33636), (131, 33654), (133, 33666), (136, 33681),

Gene: LilSmirk\_35 Start: 34280, Stop: 34669, Start Num: 65

Candidate Starts for LilSmirk\_35:

(55, 34139), (Start: 59 @34175 has 1 MA's), (Start: 65 @34280 has 306 MA's), (70, 34319), (78, 34355), (92, 34430), (101, 34466), (106, 34493), (110, 34529), (119, 34565), (121, 34568), (131, 34625), (138, 34658),

Gene: LizLemon\_35 Start: 34402, Stop: 34791, Start Num: 65

Candidate Starts for LizLemon\_35:

(55, 34261), (Start: 59 @34297 has 1 MA's), (Start: 65 @34402 has 306 MA's), (70, 34441), (101, 34588), (106, 34615), (110, 34651), (119, 34687), (121, 34690), (131, 34747), (138, 34780),

Gene: Lolalove\_32 Start: 34185, Stop: 34538, Start Num: 67

Candidate Starts for Lolalove\_32:

(Start: 67 @34185 has 30 MA's), (70, 34206), (75, 34233), (96, 34335), (107, 34371), (123, 34452), (124, 34455), (135, 34518),

Gene: Longacauda\_34 Start: 33666, Stop: 34052, Start Num: 65

Candidate Starts for Longacauda\_34:

(55, 33525), (Start: 59 @33561 has 1 MA's), (Start: 65 @33666 has 306 MA's), (70, 33705), (78, 33741), (80, 33744), (101, 33852), (106, 33879), (119, 33951), (131, 34011),

Gene: Lopsy\_34 Start: 33516, Stop: 33902, Start Num: 65

Candidate Starts for Lopsy\_34:

(55, 33375), (Start: 59 @33411 has 1 MA's), (Start: 65 @33516 has 306 MA's), (70, 33555), (78, 33591), (80, 33594), (101, 33702), (106, 33729), (119, 33801), (131, 33861),

Gene: LostAndPhound\_34 Start: 33667, Stop: 34053, Start Num: 65

Candidate Starts for LostAndPhound\_34:

(55, 33526), (Start: 59 @33562 has 1 MA's), (Start: 65 @33667 has 306 MA's), (70, 33706), (78, 33742), (80, 33745), (101, 33853), (106, 33880), (119, 33952), (131, 34012),

Gene: LuckyMarjie\_34 Start: 33676, Stop: 34062, Start Num: 65

Candidate Starts for LuckyMarjie\_34:

(55, 33535), (Start: 59 @33571 has 1 MA's), (Start: 65 @33676 has 306 MA's), (70, 33715), (78, 33751), (80, 33754), (101, 33862), (106, 33889), (119, 33961), (131, 34021),

Gene: Lulumae\_34 Start: 33658, Stop: 34044, Start Num: 65

Candidate Starts for Lulumae\_34:

(55, 33517), (Start: 59 @33553 has 1 MA's), (Start: 65 @33658 has 306 MA's), (70, 33697), (78, 33733), (80, 33736), (101, 33844), (106, 33871), (119, 33943), (131, 34003),

Gene: Lulwa\_35 Start: 33945, Stop: 34331, Start Num: 65

Candidate Starts for Lulwa\_35:

(55, 33804), (Start: 59 @33840 has 1 MA's), (Start: 65 @33945 has 306 MA's), (70, 33984), (78, 34020), (80, 34023), (101, 34131), (106, 34158), (119, 34230), (131, 34290),

Gene: Lumine\_34 Start: 33654, Stop: 34040, Start Num: 65

Candidate Starts for Lumine\_34:

(55, 33513), (Start: 59 @33549 has 1 MA's), (Start: 65 @33654 has 306 MA's), (70, 33693), (78, 33729), (80, 33732), (101, 33840), (106, 33867), (119, 33939), (131, 33999),

Gene: MOOREtheMARYer\_26 Start: 25062, Stop: 25418, Start Num: 66

Candidate Starts for MOOREtheMARYer\_26:

(Start: 66 @25062 has 69 MA's), (69, 25089), (71, 25110), (73, 25119), (88, 25164), (105, 25242), (113, 25290), (116, 25293), (121, 25320), (122, 25326),

Gene: MRabcd\_34 Start: 33658, Stop: 34044, Start Num: 65

Candidate Starts for MRabcd\_34:

(55, 33517), (Start: 59 @33553 has 1 MA's), (Start: 65 @33658 has 306 MA's), (70, 33697), (78, 33733), (80, 33736), (101, 33844), (106, 33871), (119, 33943), (131, 34003),

Gene: Mag7\_34 Start: 33564, Stop: 33950, Start Num: 65

Candidate Starts for Mag7\_34:

(55, 33423), (Start: 59 @33459 has 1 MA's), (Start: 65 @33564 has 306 MA's), (70, 33603), (78, 33639), (80, 33642), (101, 33750), (106, 33777), (119, 33849), (131, 33909),

Gene: Magic8\_35 Start: 33999, Stop: 34385, Start Num: 65

Candidate Starts for Magic8\_35:

(55, 33858), (Start: 59 @33894 has 1 MA's), (Start: 65 @33999 has 306 MA's), (70, 34038), (78, 34074), (80, 34077), (101, 34185), (106, 34212), (119, 34284), (131, 34344),

Gene: Magpie\_31 Start: 34021, Stop: 34374, Start Num: 67

Candidate Starts for Magpie\_31:

(Start: 67 @34021 has 30 MA's), (70, 34042), (75, 34069), (96, 34171), (107, 34207), (123, 34288), (124, 34291), (135, 34354),

Gene: Mana\_34 Start: 33673, Stop: 34059, Start Num: 65

Candidate Starts for Mana\_34:

(55, 33532), (Start: 59 @33568 has 1 MA's), (Start: 65 @33673 has 306 MA's), (70, 33712), (78, 33748), (80, 33751), (101, 33859), (106, 33886), (119, 33958), (131, 34018),

Gene: Manad\_34 Start: 33515, Stop: 33901, Start Num: 65

Candidate Starts for Manad\_34:

(55, 33374), (Start: 59 @33410 has 1 MA's), (Start: 65 @33515 has 306 MA's), (70, 33554), (78, 33590), (80, 33593), (101, 33701), (106, 33728), (119, 33800), (131, 33860),

Gene: Mao1\_29 Start: 30339, Stop: 30767, Start Num: 65

Candidate Starts for Mao1\_29:

(Start: 59 @30234 has 1 MA's), (Start: 65 @30339 has 306 MA's), (110, 30630), (119, 30666),

Gene: Marley1013\_35 Start: 34622, Stop: 35047, Start Num: 66

Candidate Starts for Marley1013\_35:

(Start: 59 @34517 has 1 MA's), (Start: 66 @34622 has 69 MA's), (81, 34700), (86, 34733), (88, 34742), (105, 34871), (108, 34907), (110, 34913), (115, 34925), (118, 34949), (125, 34967), (136, 35036),

Gene: Marlia\_35 Start: 33825, Stop: 34250, Start Num: 66

Candidate Starts for Marlia\_35:

(50, 33483), (52, 33594), (Start: 59 @33720 has 1 MA's), (Start: 66 @33825 has 69 MA's), (86, 33936), (88, 33945), (105, 34074), (108, 34110), (110, 34116), (115, 34128), (118, 34152), (125, 34170), (136, 34239),

Gene: Maru\_34 Start: 33616, Stop: 34002, Start Num: 65

Candidate Starts for Maru\_34:

(55, 33475), (Start: 59 @33511 has 1 MA's), (Start: 65 @33616 has 306 MA's), (70, 33655), (78, 33691), (80, 33694), (101, 33802), (106, 33829), (119, 33901), (131, 33961),

Gene: Mask\_30 Start: 30332, Stop: 30760, Start Num: 65

Candidate Starts for Mask\_30:

(Start: 59 @30227 has 1 MA's), (Start: 65 @30332 has 306 MA's), (110, 30623), (119, 30659),

Gene: Maskar\_34 Start: 33513, Stop: 33899, Start Num: 65

Candidate Starts for Maskar\_34:

(55, 33372), (Start: 59 @33408 has 1 MA's), (Start: 65 @33513 has 306 MA's), (70, 33552), (78, 33588), (80, 33591), (101, 33699), (106, 33726), (119, 33798), (131, 33858),

Gene: MasterPo\_35 Start: 34289, Stop: 34678, Start Num: 65

Candidate Starts for MasterPo\_35:

(55, 34148), (Start: 59 @34184 has 1 MA's), (Start: 65 @34289 has 306 MA's), (70, 34328), (78, 34364), (92, 34439), (101, 34475), (106, 34502), (110, 34538), (119, 34574), (121, 34577), (131, 34634), (138, 34667),

Gene: Matalotodo\_35 Start: 33959, Stop: 34345, Start Num: 65

Candidate Starts for Matalotodo\_35:

(55, 33818), (Start: 59 @33854 has 1 MA's), (Start: 65 @33959 has 306 MA's), (70, 33998), (78, 34034), (80, 34037), (101, 34145), (106, 34172), (119, 34244), (131, 34304),

Gene: Mcshane\_34 Start: 33656, Stop: 34042, Start Num: 65

Candidate Starts for Mcshane\_34:

(55, 33515), (Start: 59 @33551 has 1 MA's), (Start: 65 @33656 has 306 MA's), (70, 33695), (78, 33731), (80, 33734), (101, 33842), (106, 33869), (119, 33941), (131, 34001),

Gene: Mecca\_34 Start: 33659, Stop: 34045, Start Num: 65

Candidate Starts for Mecca\_34:

(55, 33518), (Start: 59 @33554 has 1 MA's), (Start: 65 @33659 has 306 MA's), (70, 33698), (78, 33734), (80, 33737), (101, 33845), (106, 33872), (119, 33944), (131, 34004),

Gene: Megabear\_27 Start: 30948, Stop: 31370, Start Num: 66

Candidate Starts for Megabear\_27:

(Start: 66 @30948 has 69 MA's), (70, 30978), (83, 31038), (88, 31065), (99, 31158), (101, 31173), (108, 31230), (109, 31233), (110, 31236), (117, 31260), (126, 31299),

Gene: Megamind20\_35 Start: 33681, Stop: 34067, Start Num: 65

Candidate Starts for Megamind20\_35:

(55, 33540), (Start: 59 @33576 has 1 MA's), (Start: 65 @33681 has 306 MA's), (70, 33720), (78, 33756), (80, 33759), (101, 33867), (106, 33894), (119, 33966), (131, 34026),

Gene: Megatron\_35 Start: 33957, Stop: 34343, Start Num: 65

Candidate Starts for Megatron\_35:

(55, 33816), (Start: 59 @33852 has 1 MA's), (Start: 65 @33957 has 306 MA's), (70, 33996), (78, 34032), (80, 34035), (101, 34143), (106, 34170), (119, 34242), (131, 34302),

Gene: Melc17\_35 Start: 33954, Stop: 34340, Start Num: 65

Candidate Starts for Melc17\_35:

(55, 33813), (Start: 59 @33849 has 1 MA's), (Start: 65 @33954 has 306 MA's), (70, 33993), (78, 34029), (80, 34032), (101, 34140), (106, 34167), (119, 34239), (131, 34299),

Gene: MelsMeow\_34 Start: 33562, Stop: 33948, Start Num: 65

Candidate Starts for MelsMeow\_34:

(55, 33421), (Start: 59 @33457 has 1 MA's), (Start: 65 @33562 has 306 MA's), (70, 33601), (78, 33637), (80, 33640), (101, 33748), (106, 33775), (119, 33847), (131, 33907),

Gene: Mesh1\_35 Start: 33971, Stop: 34357, Start Num: 65

Candidate Starts for Mesh1\_35:

(55, 33830), (Start: 59 @33866 has 1 MA's), (Start: 65 @33971 has 306 MA's), (70, 34010), (78, 34046), (80, 34049), (101, 34157), (106, 34184), (119, 34256), (131, 34316),

Gene: Mesmerelda\_35 Start: 33669, Stop: 34055, Start Num: 65

Candidate Starts for Mesmerelda\_35:

(55, 33528), (Start: 59 @33564 has 1 MA's), (Start: 65 @33669 has 306 MA's), (70, 33708), (78, 33744), (80, 33747), (101, 33855), (106, 33882), (119, 33954), (131, 34014),

Gene: MichaelPhcott\_34 Start: 33561, Stop: 33947, Start Num: 65

Candidate Starts for MichaelPhcott\_34:

(55, 33420), (Start: 59 @33456 has 1 MA's), (Start: 65 @33561 has 306 MA's), (70, 33600), (78, 33636), (80, 33639), (101, 33747), (106, 33774), (119, 33846), (131, 33906),

Gene: Mikota\_35 Start: 33944, Stop: 34330, Start Num: 65

Candidate Starts for Mikota\_35:

(55, 33803), (Start: 59 @33839 has 1 MA's), (Start: 65 @33944 has 306 MA's), (70, 33983), (78, 34019), (80, 34022), (101, 34130), (106, 34157), (119, 34229), (131, 34289),

Gene: MiniBoss\_35 Start: 33950, Stop: 34336, Start Num: 65

Candidate Starts for MiniBoss\_35:

(55, 33809), (Start: 59 @33845 has 1 MA's), (Start: 65 @33950 has 306 MA's), (70, 33989), (78, 34025), (80, 34028), (101, 34136), (106, 34163), (119, 34235), (131, 34295),

Gene: MitKao\_35 Start: 33665, Stop: 34051, Start Num: 65

Candidate Starts for MitKao\_35:

(55, 33524), (Start: 59 @33560 has 1 MA's), (Start: 65 @33665 has 306 MA's), (70, 33704), (78, 33740), (80, 33743), (101, 33851), (106, 33878), (119, 33950), (131, 34010),

Gene: Mithril\_32 Start: 34189, Stop: 34542, Start Num: 67

Candidate Starts for Mithril\_32:

(Start: 67 @34189 has 30 MA's), (70, 34210), (75, 34237), (96, 34339), (107, 34375), (123, 34456), (124, 34459), (135, 34522),

Gene: MmasiCarm\_35 Start: 33826, Stop: 34251, Start Num: 66

Candidate Starts for MmasiCarm\_35:

(Start: 59 @33721 has 1 MA's), (Start: 66 @33826 has 69 MA's), (81, 33904), (86, 33937), (88, 33946), (101, 34054), (105, 34075), (108, 34111), (110, 34117), (115, 34129), (118, 34153), (125, 34171), (136, 34240),

Gene: Morgushi\_35 Start: 33666, Stop: 34052, Start Num: 65

Candidate Starts for Morgushi\_35:

(55, 33525), (Start: 59 @33561 has 1 MA's), (Start: 65 @33666 has 306 MA's), (70, 33705), (78, 33741), (80, 33744), (101, 33852), (106, 33879), (119, 33951), (131, 34011),

Gene: Mortcellus\_34 Start: 34478, Stop: 34903, Start Num: 66

Candidate Starts for Mortcellus\_34:

(Start: 59 @34373 has 1 MA's), (Start: 66 @34478 has 69 MA's), (81, 34556), (86, 34589), (88, 34598), (105, 34727), (107, 34736), (108, 34763), (110, 34769), (115, 34781), (118, 34805), (125, 34823), (136, 34892),

Gene: Morty\_35 Start: 33966, Stop: 34352, Start Num: 65

Candidate Starts for Morty\_35:

(55, 33825), (Start: 59 @33861 has 1 MA's), (Start: 65 @33966 has 306 MA's), (70, 34005), (78, 34041), (80, 34044), (101, 34152), (106, 34179), (119, 34251), (131, 34311),

Gene: Morty007\_35 Start: 34622, Stop: 35047, Start Num: 66

Candidate Starts for Morty007\_35:

(Start: 59 @34517 has 1 MA's), (Start: 66 @34622 has 69 MA's), (81, 34700), (86, 34733), (88, 34742), (105, 34871), (108, 34907), (110, 34913), (115, 34925), (118, 34949), (125, 34967), (136, 35036),

Gene: Mosaic\_34 Start: 33671, Stop: 34057, Start Num: 65

Candidate Starts for Mosaic\_34:

(55, 33530), (Start: 59 @33566 has 1 MA's), (Start: 65 @33671 has 306 MA's), (70, 33710), (78, 33746), (80, 33749), (101, 33857), (106, 33884), (119, 33956), (131, 34016),

Gene: MrPhizzler\_34 Start: 33749, Stop: 34060, Start Num: 78

Candidate Starts for MrPhizzler\_34:

(55, 33533), (Start: 59 @33569 has 1 MA's), (Start: 65 @33674 has 306 MA's), (70, 33713), (78, 33749), (80, 33752), (101, 33860), (106, 33887), (119, 33959), (131, 34019),

Gene: Mudslide\_32 Start: 34421, Stop: 34774, Start Num: 67

Candidate Starts for Mudslide\_32:

(Start: 67 @34421 has 30 MA's), (70, 34442), (75, 34469), (96, 34571), (107, 34607), (123, 34688), (124, 34691), (135, 34754),

Gene: Mulan\_34 Start: 33683, Stop: 34069, Start Num: 65

Candidate Starts for Mulan\_34:

(55, 33542), (Start: 59 @33578 has 1 MA's), (Start: 65 @33683 has 306 MA's), (70, 33722), (78, 33758), (80, 33761), (101, 33869), (106, 33896), (119, 33968), (131, 34028),

Gene: Murdoc\_35 Start: 33958, Stop: 34344, Start Num: 65

Candidate Starts for Murdoc\_35:

(55, 33817), (Start: 59 @33853 has 1 MA's), (Start: 65 @33958 has 306 MA's), (70, 33997), (78, 34033), (80, 34036), (101, 34144), (106, 34171), (119, 34243), (131, 34303),

Gene: Mutante\_34 Start: 33665, Stop: 34051, Start Num: 65

Candidate Starts for Mutante\_34:

(55, 33524), (Start: 59 @33560 has 1 MA's), (Start: 65 @33665 has 306 MA's), (70, 33704), (78, 33740), (80, 33743), (101, 33851), (106, 33878), (119, 33950), (131, 34010),

Gene: Mysterious\_35 Start: 34790, Stop: 35224, Start Num: 66

Candidate Starts for Mysterious\_35:

(Start: 66 @34790 has 69 MA's), (70, 34832), (71, 34844), (79, 34871), (87, 34913), (92, 34967), (97, 34994), (101, 35024), (107, 35054),

Gene: Nacho\_0035 Start: 33960, Stop: 34346, Start Num: 65

Candidate Starts for Nacho\_0035:

(55, 33819), (Start: 59 @33855 has 1 MA's), (Start: 65 @33960 has 306 MA's), (70, 33999), (78, 34035), (80, 34038), (101, 34146), (106, 34173), (119, 34245), (131, 34305),

Gene: Nanao\_31 Start: 33147, Stop: 33500, Start Num: 67

Candidate Starts for Nanao\_31:

(Start: 67 @33147 has 30 MA's), (70, 33168), (75, 33195), (96, 33297), (107, 33333), (123, 33414), (124, 33417), (135, 33480),

Gene: Nangang\_34 Start: 34477, Stop: 34911, Start Num: 66

Candidate Starts for Nangang\_34:

(54, 34294), (Start: 59 @34372 has 1 MA's), (Start: 66 @34477 has 69 MA's), (97, 34681), (101, 34711),

Gene: Nathan\_36 Start: 33996, Stop: 34382, Start Num: 65

Candidate Starts for Nathan\_36:

(55, 33855), (Start: 59 @33891 has 1 MA's), (Start: 65 @33996 has 306 MA's), (70, 34035), (78, 34071), (80, 34074), (101, 34182), (106, 34209), (119, 34281), (131, 34341),

Gene: Nehemiah\_33 Start: 34790, Stop: 35224, Start Num: 66

Candidate Starts for Nehemiah\_33:

(Start: 66 @34790 has 69 MA's), (70, 34832), (71, 34844), (79, 34871), (87, 34913), (92, 34967), (97, 34994), (101, 35024), (107, 35054),

Gene: Neos5\_35 Start: 34641, Stop: 35066, Start Num: 66

Candidate Starts for Neos5\_35:

(Start: 59 @34536 has 1 MA's), (Start: 66 @34641 has 69 MA's), (81, 34719), (86, 34752), (88, 34761), (105, 34890), (108, 34926), (110, 34932), (115, 34944), (118, 34968), (125, 34986), (136, 35055),

Gene: Newman\_35 Start: 33957, Stop: 34343, Start Num: 65

Candidate Starts for Newman\_35:

(55, 33816), (Start: 59 @33852 has 1 MA's), (Start: 65 @33957 has 306 MA's), (70, 33996), (78, 34032), (80, 34035), (101, 34143), (106, 34170), (119, 34242), (131, 34302),

Gene: Nicole21\_35 Start: 33955, Stop: 34341, Start Num: 65

Candidate Starts for Nicole21\_35:

(55, 33814), (Start: 59 @33850 has 1 MA's), (Start: 65 @33955 has 306 MA's), (70, 33994), (78, 34030), (80, 34033), (101, 34141), (106, 34168), (119, 34240), (131, 34300),

Gene: Nigel\_30 Start: 33066, Stop: 33416, Start Num: 67

Candidate Starts for Nigel\_30:

(Start: 67 @33066 has 30 MA's), (70, 33087), (75, 33114), (96, 33213), (112, 33285), (123, 33330), (135, 33396),

Gene: Nozo\_35 Start: 34602, Stop: 35027, Start Num: 66

Candidate Starts for Nozo\_35:

(Start: 59 @34497 has 1 MA's), (Start: 66 @34602 has 69 MA's), (81, 34680), (86, 34713), (88, 34722), (105, 34851), (108, 34887), (110, 34893), (115, 34905), (118, 34929), (125, 34947), (136, 35016),

Gene: Numberten\_35 Start: 33964, Stop: 34350, Start Num: 65

Candidate Starts for Numberten\_35:

(55, 33823), (Start: 59 @33859 has 1 MA's), (Start: 65 @33964 has 306 MA's), (70, 34003), (78, 34039), (80, 34042), (101, 34150), (106, 34177), (119, 34249), (131, 34309),



Gene: Nyala\_34 Start: 33657, Stop: 34043, Start Num: 65

Candidate Starts for Nyala\_34:

(55, 33516), (Start: 59 @33552 has 1 MA's), (Start: 65 @33657 has 306 MA's), (70, 33696), (78, 33732), (80, 33735), (101, 33843), (106, 33870), (119, 33942), (131, 34002),

Gene: OSmaximus\_35 Start: 33999, Stop: 34385, Start Num: 65

Candidate Starts for OSmaximus\_35:

(55, 33858), (Start: 59 @33894 has 1 MA's), (Start: 65 @33999 has 306 MA's), (70, 34038), (78, 34074), (80, 34077), (101, 34185), (106, 34212), (119, 34284), (131, 34344),

Gene: Obutu\_35 Start: 33826, Stop: 34251, Start Num: 66

Candidate Starts for Obutu\_35:

(Start: 59 @33721 has 1 MA's), (Start: 66 @33826 has 69 MA's), (81, 33904), (86, 33937), (88, 33946), (101, 34054), (105, 34075), (108, 34111), (110, 34117), (115, 34129), (118, 34153), (125, 34171), (136, 34240),

Gene: Olak\_34 Start: 33660, Stop: 34046, Start Num: 65

Candidate Starts for Olak\_34:

(27, 33039), (31, 33123), (41, 33180), (43, 33189), (44, 33195), (55, 33519), (Start: 59 @33555 has 1 MA's), (Start: 65 @33660 has 306 MA's), (70, 33699), (78, 33735), (80, 33738), (101, 33846), (106, 33873), (119, 33945), (131, 34005),

Gene: Oline\_34 Start: 33526, Stop: 33912, Start Num: 65

Candidate Starts for Oline\_34:

(55, 33385), (Start: 59 @33421 has 1 MA's), (Start: 65 @33526 has 306 MA's), (70, 33565), (78, 33601), (80, 33604), (101, 33712), (106, 33739), (119, 33811), (131, 33871),

Gene: Olive\_35 Start: 33947, Stop: 34333, Start Num: 65

Candidate Starts for Olive\_35:

(55, 33806), (Start: 59 @33842 has 1 MA's), (Start: 65 @33947 has 306 MA's), (70, 33986), (78, 34022), (80, 34025), (101, 34133), (106, 34160), (119, 34232), (131, 34292),

Gene: OliverWalter\_35 Start: 33969, Stop: 34355, Start Num: 65

Candidate Starts for OliverWalter\_35:

(55, 33828), (Start: 59 @33864 has 1 MA's), (Start: 65 @33969 has 306 MA's), (70, 34008), (78, 34044), (80, 34047), (101, 34155), (106, 34182), (119, 34254), (131, 34314),

Gene: Olivio\_34 Start: 33695, Stop: 34120, Start Num: 66

Candidate Starts for Olivio\_34:

(Start: 59 @33590 has 1 MA's), (Start: 66 @33695 has 69 MA's), (86, 33806), (88, 33815), (101, 33923), (105, 33944), (108, 33980), (110, 33986), (115, 33998), (118, 34022), (125, 34040), (136, 34109),

Gene: Omniscient\_35 Start: 33966, Stop: 34352, Start Num: 65

Candidate Starts for Omniscient\_35:

(55, 33825), (Start: 59 @33861 has 1 MA's), (Start: 65 @33966 has 306 MA's), (70, 34005), (78, 34041), (80, 34044), (101, 34152), (106, 34179), (119, 34251), (131, 34311),

Gene: Oosterbaan\_35 Start: 33957, Stop: 34343, Start Num: 65

Candidate Starts for Oosterbaan\_35:

(55, 33816), (Start: 59 @33852 has 1 MA's), (Start: 65 @33957 has 306 MA's), (70, 33996), (78, 34032), (80, 34035), (101, 34143), (106, 34170), (119, 34242), (131, 34302),

Gene: Opia\_35 Start: 34275, Stop: 34664, Start Num: 65

Candidate Starts for Opia\_35:

(22, 33513), (25, 33630), (28, 33717), (31, 33738), (41, 33795), (43, 33804), (44, 33810), (45, 33816), (55, 34134), (Start: 59 @34170 has 1 MA's), (Start: 65 @34275 has 306 MA's), (70, 34314), (78, 34350), (92, 34425), (101, 34461), (106, 34488), (110, 34524), (119, 34560), (121, 34563), (131, 34620), (138, 34653),

Gene: OrangeOswald\_35 Start: 33843, Stop: 34268, Start Num: 66

Candidate Starts for OrangeOswald\_35:

(Start: 59 @33738 has 1 MA's), (Start: 66 @33843 has 69 MA's), (81, 33921), (86, 33954), (88, 33963), (105, 34092), (108, 34128), (110, 34134), (115, 34146), (118, 34170), (125, 34188), (136, 34257),

Gene: Orfeu\_34 Start: 33665, Stop: 34051, Start Num: 65

Candidate Starts for Orfeu\_34:

(55, 33524), (Start: 59 @33560 has 1 MA's), (Start: 65 @33665 has 306 MA's), (70, 33704), (78, 33740), (80, 33743), (101, 33851), (106, 33878), (119, 33950), (131, 34010),

Gene: Orion\_35 Start: 33955, Stop: 34341, Start Num: 65

Candidate Starts for Orion\_35:

(55, 33814), (Start: 59 @33850 has 1 MA's), (Start: 65 @33955 has 306 MA's), (70, 33994), (78, 34030), (80, 34033), (101, 34141), (106, 34168), (119, 34240), (131, 34300),

Gene: Orwigg\_34 Start: 33653, Stop: 34039, Start Num: 65

Candidate Starts for Orwigg\_34:

(55, 33512), (Start: 59 @33548 has 1 MA's), (Start: 65 @33653 has 306 MA's), (70, 33692), (78, 33728), (80, 33731), (101, 33839), (106, 33866), (119, 33938), (131, 33998),

Gene: PG1\_35 Start: 33968, Stop: 34354, Start Num: 65

Candidate Starts for PG1\_35:

(55, 33827), (Start: 59 @33863 has 1 MA's), (Start: 65 @33968 has 306 MA's), (70, 34007), (78, 34043), (80, 34046), (101, 34154), (106, 34181), (119, 34253), (131, 34313),

Gene: PR\_27 Start: 31552, Stop: 31974, Start Num: 66

Candidate Starts for PR\_27:

(Start: 66 @31552 has 69 MA's), (70, 31582), (83, 31642), (88, 31669), (99, 31762), (101, 31777), (105, 31798), (108, 31834), (109, 31837), (110, 31840), (117, 31864), (120, 31879), (126, 31903),

Gene: Pace1224\_25 Start: 24893, Stop: 25249, Start Num: 66

Candidate Starts for Pace1224\_25:

(Start: 66 @24893 has 69 MA's), (68, 24911), (70, 24929), (71, 24941), (72, 24947), (73, 24950), (88, 24995), (105, 25073), (113, 25121), (116, 25124), (122, 25157),

Gene: Pacifista\_34 Start: 33659, Stop: 34045, Start Num: 65

Candidate Starts for Pacifista\_34:

(55, 33518), (Start: 59 @33554 has 1 MA's), (Start: 65 @33659 has 306 MA's), (70, 33698), (78, 33734), (80, 33737), (101, 33845), (106, 33872), (119, 33944), (131, 34004),

Gene: PenguinLover67\_36 Start: 35506, Stop: 35865, Start Num: 67

Candidate Starts for PenguinLover67\_36:

(Start: 67 @35506 has 30 MA's), (75, 35554), (83, 35578), (93, 35632), (121, 35767), (128, 35815), (134, 35839),

Gene: Phaedrus\_33 Start: 33763, Stop: 34188, Start Num: 66

Candidate Starts for Phaedrus\_33:

(Start: 59 @33658 has 1 MA's), (Start: 66 @33763 has 69 MA's), (81, 33841), (86, 33874), (88, 33883), (101, 33991), (105, 34012), (107, 34021), (108, 34048), (110, 34054), (115, 34066), (118, 34090), (125, 34108), (136, 34177),

Gene: Phamished\_35 Start: 33963, Stop: 34349, Start Num: 65

Candidate Starts for Phamished\_35:

(55, 33822), (Start: 59 @33858 has 1 MA's), (Start: 65 @33963 has 306 MA's), (70, 34002), (78, 34038), (80, 34041), (101, 34149), (106, 34176), (119, 34248), (131, 34308),

Gene: Phantasmagoria\_35 Start: 34287, Stop: 34676, Start Num: 65

Candidate Starts for Phantasmagoria\_35:

(55, 34146), (Start: 59 @34182 has 1 MA's), (Start: 65 @34287 has 306 MA's), (70, 34326), (101, 34473), (106, 34500), (110, 34536), (119, 34572), (121, 34575), (131, 34632), (138, 34665),

Gene: Phareon\_35 Start: 33667, Stop: 34053, Start Num: 65

Candidate Starts for Phareon\_35:

(55, 33526), (Start: 59 @33562 has 1 MA's), (Start: 65 @33667 has 306 MA's), (70, 33706), (78, 33742), (80, 33745), (101, 33853), (106, 33880), (119, 33952), (131, 34012),

Gene: PhatCats2014\_35 Start: 33972, Stop: 34358, Start Num: 65

Candidate Starts for PhatCats2014\_35:

(55, 33831), (Start: 59 @33867 has 1 MA's), (Start: 65 @33972 has 306 MA's), (70, 34011), (78, 34047), (80, 34050), (101, 34158), (106, 34185), (119, 34257), (131, 34317),

Gene: PhatLouie\_35 Start: 33961, Stop: 34347, Start Num: 65

Candidate Starts for PhatLouie\_35:

(55, 33820), (Start: 59 @33856 has 1 MA's), (Start: 65 @33961 has 306 MA's), (70, 34000), (78, 34036), (80, 34039), (101, 34147), (106, 34174), (119, 34246), (131, 34306),

Gene: Phayeta\_36 Start: 33708, Stop: 34133, Start Num: 66

Candidate Starts for Phayeta\_36:

(Start: 59 @33603 has 1 MA's), (Start: 66 @33708 has 69 MA's), (86, 33819), (88, 33828), (101, 33936), (105, 33957), (108, 33993), (110, 33999), (115, 34011), (118, 34035), (125, 34053), (136, 34122),

Gene: Phelemich\_34 Start: 34789, Stop: 35223, Start Num: 66

Candidate Starts for Phelemich\_34:

(Start: 59 @34684 has 1 MA's), (Start: 66 @34789 has 69 MA's), (70, 34831), (71, 34843), (73, 34852), (79, 34870), (86, 34906), (92, 34966), (97, 34993), (101, 35023), (107, 35053),

Gene: PhenghisKhan\_34 Start: 33567, Stop: 33953, Start Num: 65

Candidate Starts for PhenghisKhan\_34:

(55, 33426), (Start: 59 @33462 has 1 MA's), (Start: 65 @33567 has 306 MA's), (70, 33606), (78, 33642), (80, 33645), (101, 33753), (106, 33780), (119, 33852), (131, 33912),

Gene: Pherdinand\_35 Start: 33963, Stop: 34349, Start Num: 65

Candidate Starts for Pherdinand\_35:

(55, 33822), (Start: 59 @33858 has 1 MA's), (Start: 65 @33963 has 306 MA's), (70, 34002), (78, 34038), (80, 34041), (101, 34149), (106, 34176), (119, 34248), (131, 34308),

Gene: Phergie\_34 Start: 33558, Stop: 33944, Start Num: 65

Candidate Starts for Phergie\_34:

(55, 33417), (Start: 59 @33453 has 1 MA's), (Start: 65 @33558 has 306 MA's), (70, 33597), (78, 33633), (80, 33636), (101, 33744), (106, 33771), (119, 33843), (131, 33903),

Gene: Philly\_34 Start: 33694, Stop: 34119, Start Num: 66

Candidate Starts for Philly\_34:

(Start: 59 @33589 has 1 MA's), (Start: 66 @33694 has 69 MA's), (81, 33772), (86, 33805), (88, 33814), (101, 33922), (105, 33943), (108, 33979), (110, 33985), (115, 33997), (118, 34021), (125, 34039), (136, 34108),

Gene: Phipps\_35 Start: 33934, Stop: 34320, Start Num: 65

Candidate Starts for Phipps\_35:

(55, 33793), (Start: 59 @33829 has 1 MA's), (Start: 65 @33934 has 306 MA's), (70, 33973), (78, 34009), (80, 34012), (101, 34120), (106, 34147), (119, 34219), (131, 34279),

Gene: Phleuron\_34 Start: 33564, Stop: 33950, Start Num: 65

Candidate Starts for Phleuron\_34:

(55, 33423), (Start: 59 @33459 has 1 MA's), (Start: 65 @33564 has 306 MA's), (70, 33603), (78, 33639), (80, 33642), (101, 33750), (106, 33777), (119, 33849), (131, 33909),

Gene: Phlyer\_35 Start: 34582, Stop: 35007, Start Num: 66

Candidate Starts for Phlyer\_35:

(Start: 59 @34477 has 1 MA's), (Start: 66 @34582 has 69 MA's), (81, 34660), (86, 34693), (88, 34702), (101, 34810), (105, 34831), (107, 34840), (108, 34867), (110, 34873), (115, 34885), (118, 34909), (125, 34927), (136, 34996),

Gene: PhrankReynolds\_34 Start: 33564, Stop: 33950, Start Num: 65

Candidate Starts for PhrankReynolds\_34:

(55, 33423), (Start: 59 @33459 has 1 MA's), (Start: 65 @33564 has 306 MA's), (70, 33603), (78, 33639), (80, 33642), (101, 33750), (106, 33777), (119, 33849), (131, 33909),

Gene: PhrodoBaggins\_34 Start: 33951, Stop: 34337, Start Num: 65

Candidate Starts for PhrodoBaggins\_34:

(55, 33810), (Start: 59 @33846 has 1 MA's), (Start: 65 @33951 has 306 MA's), (70, 33990), (78, 34026), (80, 34029), (101, 34137), (106, 34164), (119, 34236), (131, 34296),

Gene: Phunky\_35 Start: 33964, Stop: 34350, Start Num: 65

Candidate Starts for Phunky\_35:

(55, 33823), (Start: 59 @33859 has 1 MA's), (Start: 65 @33964 has 306 MA's), (70, 34003), (78, 34039), (80, 34042), (101, 34150), (106, 34177), (119, 34249), (131, 34309),

Gene: Piglet\_0034 Start: 34071, Stop: 34457, Start Num: 65

Candidate Starts for Piglet\_0034:

(55, 33930), (Start: 59 @33966 has 1 MA's), (Start: 65 @34071 has 306 MA's), (70, 34110), (78, 34146), (80, 34149), (101, 34257), (106, 34284), (119, 34356), (131, 34416),

Gene: PinheadLarry\_35 Start: 33677, Stop: 34063, Start Num: 65

Candidate Starts for PinheadLarry\_35:

(55, 33536), (Start: 59 @33572 has 1 MA's), (Start: 65 @33677 has 306 MA's), (70, 33716), (78, 33752), (80, 33755), (101, 33863), (106, 33890), (119, 33962), (131, 34022),

Gene: Pinkman\_34 Start: 33520, Stop: 33906, Start Num: 65

Candidate Starts for Pinkman\_34:

(55, 33379), (Start: 59 @33415 has 1 MA's), (Start: 65 @33520 has 306 MA's), (70, 33559), (78, 33595), (80, 33598), (101, 33706), (106, 33733), (119, 33805), (131, 33865),

Gene: Pinnie\_26 Start: 25436, Stop: 25792, Start Num: 66

Candidate Starts for Pinnie\_26:

(Start: 66 @25436 has 69 MA's), (71, 25484), (72, 25490), (73, 25493), (88, 25538), (105, 25616), (113, 25664), (116, 25667), (122, 25700),

Gene: Pipefish\_37 Start: 35235, Stop: 35660, Start Num: 66

Candidate Starts for Pipefish\_37:

(35, 34734), (46, 34785), (47, 34827), (54, 35058), (Start: 59 @35130 has 1 MA's), (Start: 66 @35235 has 69 MA's), (86, 35346), (88, 35355), (101, 35463), (105, 35484), (108, 35520), (109, 35523), (110, 35526), (115, 35538), (118, 35562), (125, 35580), (136, 35649),

Gene: Pipsqueak\_35 Start: 33962, Stop: 34348, Start Num: 65

Candidate Starts for Pipsqueak\_35:

(55, 33821), (Start: 59 @33857 has 1 MA's), (Start: 65 @33962 has 306 MA's), (70, 34001), (78, 34037), (80, 34040), (101, 34148), (106, 34175), (119, 34247), (131, 34307),

Gene: Placalicious\_34 Start: 33655, Stop: 34041, Start Num: 65

Candidate Starts for Placalicious\_34:

(55, 33514), (Start: 59 @33550 has 1 MA's), (Start: 65 @33655 has 306 MA's), (70, 33694), (78, 33730), (80, 33733), (101, 33841), (106, 33868), (119, 33940), (131, 34000),

Gene: Plata\_35 Start: 33676, Stop: 34062, Start Num: 65

Candidate Starts for Plata\_35:

(55, 33535), (Start: 59 @33571 has 1 MA's), (Start: 65 @33676 has 306 MA's), (70, 33715), (78, 33751), (80, 33754), (101, 33862), (106, 33889), (119, 33961), (131, 34021),

Gene: Plmatters\_35 Start: 33961, Stop: 34347, Start Num: 65

Candidate Starts for Plmatters\_35:

(55, 33820), (Start: 59 @33856 has 1 MA's), (Start: 65 @33961 has 306 MA's), (70, 34000), (78, 34036), (80, 34039), (101, 34147), (106, 34174), (119, 34246), (131, 34306),

Gene: Podrick\_35 Start: 33952, Stop: 34338, Start Num: 65

Candidate Starts for Podrick\_35:

(55, 33811), (Start: 59 @33847 has 1 MA's), (Start: 65 @33952 has 306 MA's), (70, 33991), (78, 34027), (80, 34030), (101, 34138), (106, 34165), (119, 34237), (131, 34297),

Gene: Pops\_35 Start: 33976, Stop: 34362, Start Num: 65

Candidate Starts for Pops\_35:

(55, 33835), (Start: 59 @33871 has 1 MA's), (Start: 65 @33976 has 306 MA's), (70, 34015), (78, 34051), (80, 34054), (101, 34162), (106, 34189), (119, 34261),

Gene: Poster\_31 Start: 33148, Stop: 33501, Start Num: 67

Candidate Starts for Poster\_31:

(Start: 67 @33148 has 30 MA's), (70, 33169), (75, 33196), (96, 33298), (107, 33334), (123, 33415), (124, 33418), (135, 33481),

Gene: Potter\_34 Start: 33676, Stop: 34062, Start Num: 65

Candidate Starts for Potter\_34:

(55, 33535), (Start: 59 @33571 has 1 MA's), (Start: 65 @33676 has 306 MA's), (70, 33715), (78, 33751), (80, 33754), (101, 33862), (106, 33889), (119, 33961), (131, 34021),

Gene: Prickles\_35 Start: 33952, Stop: 34338, Start Num: 65

Candidate Starts for Prickles\_35:

(55, 33811), (Start: 59 @33847 has 1 MA's), (Start: 65 @33952 has 306 MA's), (70, 33991), (78, 34027), (80, 34030), (101, 34138), (106, 34165), (119, 34237), (131, 34297),

Gene: Prince\_32 Start: 34331, Stop: 34684, Start Num: 67

Candidate Starts for Prince\_32:

(Start: 67 @34331 has 30 MA's), (70, 34352), (75, 34379), (96, 34481), (107, 34517), (123, 34598), (124, 34601), (135, 34664),

Gene: PrinceCharming\_35 Start: 34394, Stop: 34783, Start Num: 65

Candidate Starts for PrinceCharming\_35:

(Start: 65 @34394 has 306 MA's), (70, 34433), (78, 34469), (92, 34544), (101, 34580), (106, 34607), (110, 34643), (119, 34679), (121, 34682), (131, 34739), (138, 34772),

Gene: ProfessorX\_35 Start: 33947, Stop: 34333, Start Num: 65

Candidate Starts for ProfessorX\_35:

(55, 33806), (Start: 59 @33842 has 1 MA's), (Start: 65 @33947 has 306 MA's), (70, 33986), (78, 34022), (80, 34025), (101, 34133), (106, 34160), (119, 34232), (131, 34292),

Gene: Puhltonio\_35 Start: 33968, Stop: 34354, Start Num: 65

Candidate Starts for Puhltonio\_35:

(55, 33827), (Start: 59 @33863 has 1 MA's), (Start: 65 @33968 has 306 MA's), (70, 34007), (78, 34043), (80, 34046), (101, 34154), (106, 34181), (119, 34253), (131, 34313),

Gene: QueenBeane\_35 Start: 33958, Stop: 34344, Start Num: 65

Candidate Starts for QueenBeane\_35:

(55, 33817), (Start: 59 @33853 has 1 MA's), (Start: 65 @33958 has 306 MA's), (70, 33997), (78, 34033), (80, 34036), (101, 34144), (106, 34171), (119, 34243), (131, 34303),

Gene: QueenPie\_31 Start: 34272, Stop: 34625, Start Num: 67

Candidate Starts for QueenPie\_31:

(Start: 67 @34272 has 30 MA's), (70, 34293), (75, 34320), (96, 34422), (107, 34458), (108, 34485), (123, 34539), (135, 34605),

Gene: Quesadilla\_36 Start: 35514, Stop: 35876, Start Num: 67

Candidate Starts for Quesadilla\_36:

(Start: 67 @35514 has 30 MA's), (83, 35586), (85, 35601), (127, 35814), (128, 35823), (134, 35847),

Gene: Quisquilliae\_35 Start: 33986, Stop: 34372, Start Num: 65

Candidate Starts for Quisquilliae\_35:

(55, 33845), (Start: 59 @33881 has 1 MA's), (Start: 65 @33986 has 306 MA's), (70, 34025), (78, 34061), (80, 34064), (101, 34172), (106, 34199), (119, 34271), (131, 34331),

Gene: Qyrzula\_33 Start: 34400, Stop: 34822, Start Num: 66

Candidate Starts for Qyrzula\_33:

(29, 33857), (30, 33860), (38, 33911), (46, 33950), (47, 33992), (54, 34223), (Start: 59 @34295 has 1 MA's), (Start: 66 @34400 has 69 MA's), (70, 34430), (83, 34490), (99, 34610), (101, 34625), (105, 34646), (107, 34655), (110, 34688), (117, 34712), (136, 34811),

Gene: RagingRooster\_35 Start: 33844, Stop: 34269, Start Num: 66

Candidate Starts for RagingRooster\_35:

(Start: 59 @33739 has 1 MA's), (Start: 66 @33844 has 69 MA's), (81, 33922), (86, 33955), (88, 33964), (101, 34072), (105, 34093), (108, 34129), (110, 34135), (115, 34147), (118, 34171), (125, 34189), (136, 34258),

Gene: RawrgerThat\_32 Start: 34176, Stop: 34529, Start Num: 67

Candidate Starts for RawrgerThat\_32:

(Start: 67 @34176 has 30 MA's), (70, 34197), (75, 34224), (96, 34326), (107, 34362), (123, 34443), (124, 34446), (135, 34509),

Gene: RedMaple\_34 Start: 33965, Stop: 34351, Start Num: 65

Candidate Starts for RedMaple\_34:

(55, 33824), (Start: 59 @33860 has 1 MA's), (Start: 65 @33965 has 306 MA's), (70, 34004), (78, 34040), (80, 34043), (101, 34151), (106, 34178), (119, 34250), (131, 34310),

Gene: Reprobate\_34 Start: 34794, Stop: 35228, Start Num: 66

Candidate Starts for Reprobate\_34:

(Start: 59 @34689 has 1 MA's), (Start: 66 @34794 has 69 MA's), (70, 34836), (71, 34848), (73, 34857), (79, 34875), (86, 34911), (92, 34971), (97, 34998), (101, 35028), (107, 35058),

Gene: Rhinoforte\_35 Start: 34396, Stop: 34785, Start Num: 65

Candidate Starts for Rhinoforte\_35:

(55, 34255), (Start: 59 @34291 has 1 MA's), (Start: 65 @34396 has 306 MA's), (70, 34435), (78, 34471), (92, 34546), (101, 34582), (106, 34609), (110, 34645), (119, 34681), (121, 34684), (131, 34741), (138, 34774),

Gene: Rich\_33 Start: 34300, Stop: 34734, Start Num: 66

Candidate Starts for Rich\_33:

(54, 34120), (Start: 66 @34300 has 69 MA's), (70, 34342), (71, 34354), (79, 34381), (92, 34477), (97, 34504), (98, 34513), (101, 34534), (107, 34564), (130, 34693),

Gene: Ricotta\_34 Start: 33684, Stop: 34070, Start Num: 65

Candidate Starts for Ricotta\_34:

(27, 33063), (31, 33147), (41, 33204), (43, 33213), (44, 33219), (55, 33543), (Start: 59 @33579 has 1 MA's), (Start: 65 @33684 has 306 MA's), (70, 33723), (78, 33759), (80, 33762), (101, 33870), (106, 33897), (119, 33969), (131, 34029),

Gene: Riggan\_35 Start: 33945, Stop: 34331, Start Num: 65

Candidate Starts for Riggan\_35:

(55, 33804), (Start: 59 @33840 has 1 MA's), (Start: 65 @33945 has 306 MA's), (70, 33984), (78, 34020), (80, 34023), (101, 34131), (106, 34158), (119, 34230), (131, 34290),

Gene: Rimu\_36 Start: 33769, Stop: 34080, Start Num: 78

Candidate Starts for Rimu\_36:

(55, 33553), (Start: 59 @33589 has 1 MA's), (Start: 65 @33694 has 306 MA's), (70, 33733), (78, 33769), (80, 33772), (101, 33880), (106, 33907), (119, 33979), (131, 34039),

Gene: Rinkes\_36 Start: 35417, Stop: 35803, Start Num: 65

Candidate Starts for Rinkes\_36:

(1, 33578), (2, 33653), (3, 33659), (4, 33662), (5, 33740), (6, 33776), (7, 33824), (8, 33872), (9, 33929), (10, 33932), (11, 34007), (17, 34553), (19, 34643), (23, 34682), (53, 35192), (55, 35282), (58, 35306), (Start: 59 @35312 has 1 MA's), (Start: 65 @35417 has 306 MA's), (70, 35447), (71, 35459), (80, 35483), (101, 35597), (102, 35603), (104, 35618), (110, 35663), (121, 35702), (131, 35759), (137, 35789),

Gene: Rita130\_34 Start: 34516, Stop: 34950, Start Num: 66

Candidate Starts for Rita130\_34:

(54, 34339), (Start: 59 @34411 has 1 MA's), (Start: 66 @34516 has 69 MA's), (70, 34558), (71, 34570), (79, 34597), (92, 34693), (97, 34720), (101, 34750), (105, 34771), (107, 34780),

Gene: Rita1961\_35 Start: 33827, Stop: 34252, Start Num: 66

Candidate Starts for Rita1961\_35:

(Start: 59 @33722 has 1 MA's), (Start: 66 @33827 has 69 MA's), (81, 33905), (86, 33938), (88, 33947), (101, 34055), (105, 34076), (108, 34112), (110, 34118), (115, 34130), (118, 34154), (125, 34172), (136, 34241),

Gene: Riverton\_34 Start: 33966, Stop: 34352, Start Num: 65

Candidate Starts for Riverton\_34:

(55, 33825), (Start: 59 @33861 has 1 MA's), (Start: 65 @33966 has 306 MA's), (70, 34005), (78, 34041), (80, 34044), (101, 34152), (106, 34179), (119, 34251), (131, 34311),

Gene: Robyn\_34 Start: 33529, Stop: 33915, Start Num: 65

Candidate Starts for Robyn\_34:

(55, 33388), (Start: 59 @33424 has 1 MA's), (Start: 65 @33529 has 306 MA's), (70, 33568), (78, 33604), (80, 33607), (101, 33715), (106, 33742), (119, 33814), (131, 33874),

Gene: Roliet\_35 Start: 33954, Stop: 34340, Start Num: 65

Candidate Starts for Roliet\_35:

(55, 33813), (Start: 59 @33849 has 1 MA's), (Start: 65 @33954 has 306 MA's), (70, 33993), (78, 34029), (80, 34032), (101, 34140), (106, 34167), (119, 34239), (131, 34299),

Gene: RomaT\_35 Start: 34617, Stop: 35042, Start Num: 66

Candidate Starts for RomaT\_35:

(Start: 59 @34512 has 1 MA's), (Start: 66 @34617 has 69 MA's), (81, 34695), (86, 34728), (88, 34737), (101, 34845), (105, 34866), (107, 34875), (108, 34902), (110, 34908), (115, 34920), (118, 34944), (125, 34962), (136, 35031),

Gene: Roscoe\_36 Start: 34192, Stop: 34578, Start Num: 65

Candidate Starts for Roscoe\_36:

(55, 34051), (Start: 59 @34087 has 1 MA's), (Start: 65 @34192 has 306 MA's), (70, 34231), (78, 34267), (80, 34270), (101, 34378), (106, 34405), (119, 34477), (131, 34537),

Gene: Rosebush\_35 Start: 34403, Stop: 34792, Start Num: 65

Candidate Starts for Rosebush\_35:

(55, 34262), (Start: 59 @34298 has 1 MA's), (Start: 65 @34403 has 306 MA's), (70, 34442), (78, 34478), (92, 34553), (101, 34589), (106, 34616), (110, 34652), (119, 34688), (121, 34691), (131, 34748), (138, 34781),

Gene: Roy17\_35 Start: 33658, Stop: 34044, Start Num: 65

Candidate Starts for Roy17\_35:

(55, 33517), (Start: 59 @33553 has 1 MA's), (Start: 65 @33658 has 306 MA's), (70, 33697), (78, 33733), (80, 33736), (101, 33844), (106, 33871), (119, 33943), (131, 34003),

Gene: SDcharge11\_35 Start: 33932, Stop: 34318, Start Num: 65

Candidate Starts for SDcharge11\_35:

(55, 33791), (Start: 59 @33827 has 1 MA's), (Start: 65 @33932 has 306 MA's), (70, 33971), (78, 34007), (80, 34010), (101, 34118), (106, 34145), (119, 34217), (131, 34277),



Gene: Sabella\_35 Start: 34280, Stop: 34669, Start Num: 65

Candidate Starts for Sabella\_35:

(55, 34139), (Start: 59 @34175 has 1 MA's), (Start: 65 @34280 has 306 MA's), (70, 34319), (78, 34355), (92, 34430), (101, 34466), (106, 34493), (110, 34529), (119, 34565), (121, 34568), (131, 34625), (138, 34658),

Gene: Saguaro\_35 Start: 35199, Stop: 35576, Start Num: 64

Candidate Starts for Saguaro\_35:

(57, 35088), (Start: 64 @35199 has 2 MA's), (73, 35259), (75, 35265), (77, 35274), (105, 35394), (114, 35445), (127, 35514),

Gene: Samaymay\_35 Start: 33958, Stop: 34344, Start Num: 65

Candidate Starts for Samaymay\_35:

(55, 33817), (Start: 59 @33853 has 1 MA's), (Start: 65 @33958 has 306 MA's), (70, 33997), (78, 34033), (80, 34036), (101, 34144), (106, 34171), (119, 34243), (131, 34303),

Gene: SassyCat97\_34 Start: 33664, Stop: 34050, Start Num: 65

Candidate Starts for SassyCat97\_34:

(55, 33523), (Start: 59 @33559 has 1 MA's), (Start: 65 @33664 has 306 MA's), (70, 33703), (78, 33739), (80, 33742), (101, 33850), (106, 33877), (119, 33949), (131, 34009),

Gene: Schadenfreude\_34 Start: 33515, Stop: 33901, Start Num: 65

Candidate Starts for Schadenfreude\_34:

(55, 33374), (Start: 59 @33410 has 1 MA's), (Start: 65 @33515 has 306 MA's), (70, 33554), (78, 33590), (80, 33593), (101, 33701), (106, 33728), (119, 33800), (131, 33860),

Gene: Schueller\_34 Start: 33680, Stop: 34066, Start Num: 65

Candidate Starts for Schueller\_34:

(55, 33539), (Start: 59 @33575 has 1 MA's), (Start: 65 @33680 has 306 MA's), (70, 33719), (78, 33755), (80, 33758), (101, 33866), (106, 33893), (119, 33965), (131, 34025),

Gene: Scoot17C\_35 Start: 33957, Stop: 34343, Start Num: 65

Candidate Starts for Scoot17C\_35:

(55, 33816), (Start: 59 @33852 has 1 MA's), (Start: 65 @33957 has 306 MA's), (70, 33996), (78, 34032), (80, 34035), (101, 34143), (106, 34170), (119, 34242), (131, 34302),

Gene: Scrick\_35 Start: 33682, Stop: 34068, Start Num: 65

Candidate Starts for Scrick\_35:

(55, 33541), (Start: 59 @33577 has 1 MA's), (Start: 65 @33682 has 306 MA's), (70, 33721), (78, 33757), (80, 33760), (101, 33868), (106, 33895), (119, 33967), (131, 34027),

Gene: Sejanus\_30 Start: 31273, Stop: 31701, Start Num: 65

Candidate Starts for Sejanus\_30:

(Start: 59 @31168 has 1 MA's), (Start: 65 @31273 has 306 MA's), (110, 31564), (119, 31600),

Gene: Selr12\_35 Start: 33685, Stop: 34071, Start Num: 65

Candidate Starts for Selr12\_35:

(27, 33064), (31, 33148), (41, 33205), (43, 33214), (44, 33220), (55, 33544), (Start: 59 @33580 has 1 MA's), (Start: 65 @33685 has 306 MA's), (70, 33724), (78, 33760), (80, 33763), (101, 33871), (106, 33898), (119, 33970), (131, 34030),

Gene: Serendipitous\_33 Start: 34367, Stop: 34795, Start Num: 66

Candidate Starts for Serendipitous\_33:

(54, 34190), (Start: 59 @34262 has 1 MA's), (Start: 66 @34367 has 69 MA's), (71, 34415), (94, 34550), (97, 34565), (101, 34595), (105, 34616), (107, 34625), (130, 34754),

Gene: Serendipity\_35 Start: 33982, Stop: 34368, Start Num: 65

Candidate Starts for Serendipity\_35:

(55, 33841), (Start: 59 @33877 has 1 MA's), (Start: 65 @33982 has 306 MA's), (70, 34021), (78, 34057), (80, 34060), (101, 34168), (106, 34195), (119, 34267), (131, 34327),

Gene: Serpentine\_0035 Start: 33963, Stop: 34349, Start Num: 65

Candidate Starts for Serpentine\_0035:

(55, 33822), (Start: 59 @33858 has 1 MA's), (Start: 65 @33963 has 306 MA's), (70, 34002), (78, 34038), (80, 34041), (101, 34149), (106, 34176), (119, 34248), (131, 34308),

Gene: Sheila\_35 Start: 34000, Stop: 34386, Start Num: 65

Candidate Starts for Sheila\_35:

(55, 33859), (Start: 59 @33895 has 1 MA's), (Start: 65 @34000 has 306 MA's), (70, 34039), (78, 34075), (80, 34078), (101, 34186), (106, 34213), (119, 34285), (131, 34345),

Gene: Shenandoah\_35 Start: 33816, Stop: 34241, Start Num: 66

Candidate Starts for Shenandoah\_35:

(Start: 59 @33711 has 1 MA's), (Start: 66 @33816 has 69 MA's), (81, 33894), (86, 33927), (88, 33936), (101, 34044), (105, 34065), (108, 34101), (110, 34107), (115, 34119), (118, 34143), (125, 34161), (136, 34230),

Gene: Shenyu\_34 Start: 34477, Stop: 34911, Start Num: 66

Candidate Starts for Shenyu\_34:

(54, 34294), (Start: 59 @34372 has 1 MA's), (Start: 66 @34477 has 69 MA's), (97, 34681), (101, 34711),

Gene: ShiVal\_35 Start: 33956, Stop: 34342, Start Num: 65

Candidate Starts for ShiVal\_35:

(55, 33815), (Start: 59 @33851 has 1 MA's), (Start: 65 @33956 has 306 MA's), (70, 33995), (78, 34031), (80, 34034), (101, 34142), (106, 34169), (119, 34241), (131, 34301),

Gene: Sigman\_35 Start: 33948, Stop: 34334, Start Num: 65

Candidate Starts for Sigman\_35:

(55, 33807), (Start: 59 @33843 has 1 MA's), (Start: 65 @33948 has 306 MA's), (70, 33987), (78, 34023), (80, 34026), (101, 34134), (106, 34161), (119, 34233), (131, 34293),

Gene: SilverBell\_35 Start: 33978, Stop: 34364, Start Num: 65

Candidate Starts for SilverBell\_35:

(55, 33837), (Start: 59 @33873 has 1 MA's), (Start: 65 @33978 has 306 MA's), (70, 34017), (78, 34053), (80, 34056), (101, 34164), (106, 34191), (119, 34263), (131, 34323),

Gene: Simielle\_34 Start: 33651, Stop: 34037, Start Num: 65

Candidate Starts for Simielle\_34:

(55, 33510), (Start: 59 @33546 has 1 MA's), (Start: 65 @33651 has 306 MA's), (70, 33690), (78, 33726), (80, 33729), (101, 33837), (106, 33864), (119, 33936), (131, 33996),

Gene: SirBeauregard\_35 Start: 33655, Stop: 34041, Start Num: 65

Candidate Starts for SirBeauregard\_35:

(55, 33514), (Start: 59 @33550 has 1 MA's), (Start: 65 @33655 has 306 MA's), (70, 33694), (78, 33730), (80, 33733), (101, 33841), (106, 33868), (119, 33940), (131, 34000),

Gene: SirJeffery\_34 Start: 34515, Stop: 34949, Start Num: 66

Candidate Starts for SirJeffery\_34:

(54, 34338), (Start: 59 @34410 has 1 MA's), (Start: 66 @34515 has 69 MA's), (70, 34557), (71, 34569), (79, 34596), (92, 34692), (97, 34719), (101, 34749), (105, 34770), (107, 34779),

Gene: Skippy\_35 Start: 33946, Stop: 34332, Start Num: 65

Candidate Starts for Skippy\_35:

(55, 33805), (Start: 59 @33841 has 1 MA's), (Start: 65 @33946 has 306 MA's), (70, 33985), (78, 34021), (80, 34024), (101, 34132), (106, 34159), (119, 34231), (131, 34291),

Gene: Slatt\_35 Start: 33972, Stop: 34358, Start Num: 65

Candidate Starts for Slatt\_35:

(55, 33831), (Start: 59 @33867 has 1 MA's), (Start: 65 @33972 has 306 MA's), (70, 34011), (78, 34047), (80, 34050), (101, 34158), (106, 34185), (119, 34257), (131, 34317),

Gene: SlippinJimmy\_35 Start: 34609, Stop: 35034, Start Num: 66

Candidate Starts for SlippinJimmy\_35:

(Start: 59 @34504 has 1 MA's), (Start: 66 @34609 has 69 MA's), (81, 34687), (86, 34720), (88, 34729), (105, 34858), (108, 34894), (110, 34900), (115, 34912), (118, 34936), (125, 34954), (136, 35023),

Gene: Soile\_35 Start: 33678, Stop: 34064, Start Num: 65

Candidate Starts for Soile\_35:

(55, 33537), (Start: 59 @33573 has 1 MA's), (Start: 65 @33678 has 306 MA's), (70, 33717), (78, 33753), (80, 33756), (101, 33864), (106, 33891), (119, 33963), (131, 34023),

Gene: Solosis\_34 Start: 33673, Stop: 34059, Start Num: 65

Candidate Starts for Solosis\_34:

(55, 33532), (Start: 59 @33568 has 1 MA's), (Start: 65 @33673 has 306 MA's), (70, 33712), (78, 33748), (80, 33751), (101, 33859), (106, 33886), (119, 33958), (131, 34018),

Gene: Sophia\_34 Start: 33673, Stop: 34059, Start Num: 65

Candidate Starts for Sophia\_34:

(55, 33532), (Start: 59 @33568 has 1 MA's), (Start: 65 @33673 has 306 MA's), (70, 33712), (78, 33748), (80, 33751), (101, 33859), (106, 33886), (119, 33958), (131, 34018),

Gene: Soto\_35 Start: 33966, Stop: 34352, Start Num: 65

Candidate Starts for Soto\_35:

(55, 33825), (Start: 59 @33861 has 1 MA's), (Start: 65 @33966 has 306 MA's), (70, 34005), (78, 34041), (80, 34044), (101, 34152), (106, 34179), (119, 34251), (131, 34311),

Gene: Spartan300\_35 Start: 33952, Stop: 34338, Start Num: 65

Candidate Starts for Spartan300\_35:

(55, 33811), (Start: 59 @33847 has 1 MA's), (Start: 65 @33952 has 306 MA's), (70, 33991), (78, 34027), (80, 34030), (101, 34138), (106, 34165), (119, 34237), (131, 34297),

Gene: Squid\_35 Start: 33664, Stop: 34050, Start Num: 65

Candidate Starts for Squid\_35:

(55, 33523), (Start: 59 @33559 has 1 MA's), (Start: 65 @33664 has 306 MA's), (70, 33703), (78, 33739), (80, 33742), (101, 33850), (106, 33877), (119, 33949), (131, 34009),

Gene: Squiggle\_35 Start: 33676, Stop: 34062, Start Num: 65

Candidate Starts for Squiggle\_35:

(55, 33535), (Start: 59 @33571 has 1 MA's), (Start: 65 @33676 has 306 MA's), (70, 33715), (78, 33751), (80, 33754), (101, 33862), (106, 33889), (119, 33961), (131, 34021),

Gene: Stinger\_30 Start: 32752, Stop: 33105, Start Num: 67

Candidate Starts for Stinger\_30:

(Start: 67 @32752 has 30 MA's), (70, 32773), (75, 32800), (96, 32902), (107, 32938), (108, 32965), (123, 33019), (124, 33022), (135, 33085),

Gene: StinkyVeggy\_36 Start: 34667, Stop: 35101, Start Num: 66

Candidate Starts for StinkyVeggy\_36:

(54, 34484), (Start: 59 @34562 has 1 MA's), (Start: 66 @34667 has 69 MA's), (97, 34871), (101, 34901),

Gene: Struggle\_34 Start: 33514, Stop: 33900, Start Num: 65

Candidate Starts for Struggle\_34:

(55, 33373), (Start: 59 @33409 has 1 MA's), (Start: 65 @33514 has 306 MA's), (70, 33553), (78, 33589), (80, 33592), (101, 33700), (106, 33727), (119, 33799), (131, 33859),

Gene: Suffolk\_35 Start: 33963, Stop: 34349, Start Num: 65

Candidate Starts for Suffolk\_35:

(55, 33822), (Start: 59 @33858 has 1 MA's), (Start: 65 @33963 has 306 MA's), (70, 34002), (78, 34038), (80, 34041), (101, 34149), (106, 34176), (119, 34248), (131, 34308),

Gene: Suigeneris\_34 Start: 34518, Stop: 34952, Start Num: 66

Candidate Starts for Suigeneris\_34:

(54, 34341), (Start: 59 @34413 has 1 MA's), (Start: 66 @34518 has 69 MA's), (70, 34560), (71, 34572), (79, 34599), (92, 34695), (97, 34722), (105, 34773), (107, 34782),

Gene: Surely\_35 Start: 33966, Stop: 34352, Start Num: 65

Candidate Starts for Surely\_35:

(55, 33825), (Start: 59 @33861 has 1 MA's), (Start: 65 @33966 has 306 MA's), (70, 34005), (78, 34041), (80, 34044), (101, 34152), (106, 34179), (119, 34251), (131, 34311),

Gene: SwainyDoc\_35 Start: 33838, Stop: 34263, Start Num: 66

Candidate Starts for SwainyDoc\_35:

(Start: 59 @33733 has 1 MA's), (Start: 66 @33838 has 69 MA's), (81, 33916), (86, 33949), (88, 33958), (101, 34066), (105, 34087), (108, 34123), (110, 34129), (115, 34141), (118, 34165), (125, 34183), (136, 34252),

Gene: Swiphy\_36 Start: 33961, Stop: 34347, Start Num: 65

Candidate Starts for Swiphy\_36:

(55, 33820), (Start: 59 @33856 has 1 MA's), (Start: 65 @33961 has 306 MA's), (70, 34000), (78, 34036), (80, 34039), (101, 34147), (106, 34174), (119, 34246), (131, 34306),

Gene: Swish\_35 Start: 33949, Stop: 34335, Start Num: 65

Candidate Starts for Swish\_35:

(55, 33808), (Start: 59 @33844 has 1 MA's), (Start: 65 @33949 has 306 MA's), (70, 33988), (78, 34024), (80, 34027), (101, 34135), (106, 34162), (119, 34234), (131, 34294),

Gene: SynergyX\_35 Start: 33844, Stop: 34269, Start Num: 66

Candidate Starts for SynergyX\_35:

(Start: 59 @33739 has 1 MA's), (Start: 66 @33844 has 69 MA's), (81, 33922), (86, 33955), (88, 33964), (101, 34072), (105, 34093), (108, 34129), (110, 34135), (115, 34147), (118, 34171), (125, 34189), (136, 34258),

Gene: TA17A\_36 Start: 34270, Stop: 34659, Start Num: 65

Candidate Starts for TA17A\_36:

(55, 34129), (Start: 59 @34165 has 1 MA's), (Start: 65 @34270 has 306 MA's), (70, 34309), (101, 34456), (106, 34483), (110, 34519), (119, 34555), (121, 34558), (131, 34615), (138, 34648),

Gene: TallGrassMM\_35 Start: 33588, Stop: 33974, Start Num: 65

Candidate Starts for TallGrassMM\_35:

(55, 33447), (Start: 59 @33483 has 1 MA's), (Start: 65 @33588 has 306 MA's), (70, 33627), (78, 33663), (80, 33666), (101, 33774), (106, 33801), (119, 33873), (131, 33933),

Gene: Taptic\_27 Start: 30948, Stop: 31370, Start Num: 66

Candidate Starts for Taptic\_27:

(Start: 66 @30948 has 69 MA's), (70, 30978), (83, 31038), (88, 31065), (99, 31158), (101, 31173), (105, 31194), (108, 31230), (109, 31233), (110, 31236), (117, 31260),

Gene: Telesworld\_34 Start: 33661, Stop: 34047, Start Num: 65

Candidate Starts for Telesworld\_34:

(55, 33520), (Start: 59 @33556 has 1 MA's), (Start: 65 @33661 has 306 MA's), (70, 33700), (78, 33736), (80, 33739), (101, 33847), (106, 33874), (119, 33946), (131, 34006),

Gene: Thonko\_33 Start: 31502, Stop: 31870, Start Num: 66

Candidate Starts for Thonko\_33:

(Start: 59 @31394 has 1 MA's), (Start: 66 @31502 has 69 MA's), (76, 31571), (82, 31580), (84, 31598), (111, 31736), (123, 31784), (127, 31814), (135, 31850),

Gene: Thora\_35 Start: 33965, Stop: 34351, Start Num: 65

Candidate Starts for Thora\_35:

(55, 33824), (Start: 59 @33860 has 1 MA's), (Start: 65 @33965 has 306 MA's), (70, 34004), (78, 34040), (80, 34043), (101, 34151), (106, 34178), (119, 34250), (131, 34310),

Gene: ThreeOh3D2\_35 Start: 33963, Stop: 34349, Start Num: 65

Candidate Starts for ThreeOh3D2\_35:

(55, 33822), (Start: 59 @33858 has 1 MA's), (Start: 65 @33963 has 306 MA's), (70, 34002), (78, 34038), (80, 34041), (101, 34149), (106, 34176), (119, 34248), (131, 34308),

Gene: Thunderbird\_34 Start: 33669, Stop: 34055, Start Num: 65

Candidate Starts for Thunderbird\_34:

(55, 33528), (Start: 59 @33564 has 1 MA's), (Start: 65 @33669 has 306 MA's), (70, 33708), (78, 33744), (80, 33747), (101, 33855), (106, 33882), (119, 33954), (131, 34014),

Gene: Timmi\_34 Start: 33674, Stop: 34060, Start Num: 65

Candidate Starts for Timmi\_34:

(55, 33533), (Start: 59 @33569 has 1 MA's), (Start: 65 @33674 has 306 MA's), (70, 33713), (78, 33749), (80, 33752), (101, 33860), (106, 33887), (119, 33959), (131, 34019),

Gene: Tinciduntolum\_36 Start: 34408, Stop: 34797, Start Num: 65

Candidate Starts for Tinciduntolum\_36:

(55, 34267), (Start: 59 @34303 has 1 MA's), (Start: 65 @34408 has 306 MA's), (70, 34447), (78, 34483), (92, 34558), (101, 34594), (106, 34621), (110, 34657), (119, 34693), (121, 34696), (131,

34753), (138, 34786),

Gene: TinyTerror\_35 Start: 33829, Stop: 34254, Start Num: 66

Candidate Starts for TinyTerror\_35:

(Start: 59 @33724 has 1 MA's), (Start: 66 @33829 has 69 MA's), (81, 33907), (86, 33940), (88, 33949), (101, 34057), (105, 34078), (108, 34114), (110, 34120), (115, 34132), (118, 34156), (125, 34174), (136, 34243),

Gene: TomBombadil\_35 Start: 33959, Stop: 34345, Start Num: 65

Candidate Starts for TomBombadil\_35:

(55, 33818), (Start: 59 @33854 has 1 MA's), (Start: 65 @33959 has 306 MA's), (70, 33998), (78, 34034), (80, 34037), (101, 34145), (106, 34172), (119, 34244), (131, 34304),

Gene: Tomlarah\_35 Start: 33950, Stop: 34336, Start Num: 65

Candidate Starts for Tomlarah\_35:

(55, 33809), (Start: 59 @33845 has 1 MA's), (Start: 65 @33950 has 306 MA's), (70, 33989), (78, 34025), (80, 34028), (101, 34136), (106, 34163), (119, 34235), (131, 34295),

Gene: Toni\_34 Start: 33666, Stop: 34052, Start Num: 65

Candidate Starts for Toni\_34:

(55, 33525), (Start: 59 @33561 has 1 MA's), (Start: 65 @33666 has 306 MA's), (70, 33705), (78, 33741), (80, 33744), (101, 33852), (106, 33879), (119, 33951), (131, 34011),

Gene: TooFast2Furius\_36 Start: 34195, Stop: 34581, Start Num: 65

Candidate Starts for TooFast2Furius\_36:

(55, 34054), (Start: 59 @34090 has 1 MA's), (Start: 65 @34195 has 306 MA's), (70, 34234), (78, 34270), (80, 34273), (101, 34381), (106, 34408), (119, 34480), (131, 34540),

Gene: Tooj\_35 Start: 34023, Stop: 34409, Start Num: 65

Candidate Starts for Tooj\_35:

(55, 33882), (Start: 59 @33918 has 1 MA's), (Start: 65 @34023 has 306 MA's), (70, 34062), (78, 34098), (80, 34101), (101, 34209), (106, 34236), (119, 34308), (131, 34368),

Gene: Tres\_35 Start: 34283, Stop: 34672, Start Num: 65

Candidate Starts for Tres\_35:

(55, 34142), (Start: 59 @34178 has 1 MA's), (Start: 65 @34283 has 306 MA's), (70, 34322), (78, 34358), (92, 34433), (101, 34469), (106, 34496), (110, 34532), (119, 34568), (121, 34571), (131, 34628), (138, 34661),

Gene: True\_34 Start: 33663, Stop: 34049, Start Num: 65

Candidate Starts for True\_34:

(55, 33522), (Start: 59 @33558 has 1 MA's), (Start: 65 @33663 has 306 MA's), (70, 33702), (78, 33738), (80, 33741), (101, 33849), (106, 33876), (119, 33948), (131, 34008),

Gene: Trypo\_35 Start: 33959, Stop: 34345, Start Num: 65

Candidate Starts for Trypo\_35:

(55, 33818), (Start: 59 @33854 has 1 MA's), (Start: 65 @33959 has 306 MA's), (70, 33998), (78, 34034), (80, 34037), (101, 34145), (106, 34172), (119, 34244), (131, 34304),

Gene: Tydolla\_35 Start: 34578, Stop: 35003, Start Num: 66

Candidate Starts for Tydolla\_35:

(Start: 59 @34473 has 1 MA's), (Start: 66 @34578 has 69 MA's), (81, 34656), (86, 34689), (88, 34698), (101, 34806), (105, 34827), (108, 34863), (110, 34869), (115, 34881), (118, 34905), (125, 34923),

(136, 34992),

Gene: TyrionL\_34 Start: 33522, Stop: 33908, Start Num: 65

Candidate Starts for TyrionL\_34:

(55, 33381), (Start: 59 @33417 has 1 MA's), (Start: 65 @33522 has 306 MA's), (70, 33561), (78, 33597), (80, 33600), (101, 33708), (106, 33735), (119, 33807), (131, 33867),

Gene: UAch1\_35 Start: 33972, Stop: 34358, Start Num: 65

Candidate Starts for UAch1\_35:

(55, 33831), (Start: 59 @33867 has 1 MA's), (Start: 65 @33972 has 306 MA's), (70, 34011), (78, 34047), (80, 34050), (101, 34158), (106, 34185), (119, 34257), (131, 34317),

Gene: UncleHowie\_35 Start: 33662, Stop: 34048, Start Num: 65

Candidate Starts for UncleHowie\_35:

(55, 33521), (Start: 59 @33557 has 1 MA's), (Start: 65 @33662 has 306 MA's), (70, 33701), (78, 33737), (80, 33740), (101, 33848), (106, 33875), (119, 33947), (131, 34007),

Gene: Usavi\_35 Start: 33963, Stop: 34349, Start Num: 65

Candidate Starts for Usavi\_35:

(55, 33822), (Start: 59 @33858 has 1 MA's), (Start: 65 @33963 has 306 MA's), (70, 34002), (78, 34038), (80, 34041), (101, 34149), (106, 34176), (119, 34248), (131, 34308),

Gene: Vaishali24\_34 Start: 33624, Stop: 34010, Start Num: 65

Candidate Starts for Vaishali24\_34:

(55, 33483), (Start: 59 @33519 has 1 MA's), (Start: 65 @33624 has 306 MA's), (70, 33663), (78, 33699), (80, 33702), (101, 33810), (106, 33837), (119, 33909), (131, 33969),

Gene: Valjean\_35 Start: 33955, Stop: 34341, Start Num: 65

Candidate Starts for Valjean\_35:

(55, 33814), (Start: 59 @33850 has 1 MA's), (Start: 65 @33955 has 306 MA's), (70, 33994), (78, 34030), (80, 34033), (101, 34141), (106, 34168), (119, 34240), (131, 34300),

Gene: Vaticameos\_35 Start: 33653, Stop: 34039, Start Num: 65

Candidate Starts for Vaticameos\_35:

(55, 33512), (Start: 59 @33548 has 1 MA's), (Start: 65 @33653 has 306 MA's), (70, 33692), (78, 33728), (80, 33731), (101, 33839), (106, 33866), (119, 33938), (131, 33998),

Gene: Veritas\_34 Start: 33525, Stop: 33911, Start Num: 65

Candidate Starts for Veritas\_34:

(55, 33384), (Start: 59 @33420 has 1 MA's), (Start: 65 @33525 has 306 MA's), (70, 33564), (78, 33600), (80, 33603), (101, 33711), (106, 33738), (119, 33810), (131, 33870),

Gene: Vic9\_00035 Start: 34753, Stop: 35175, Start Num: 66

Candidate Starts for Vic9\_00035:

(35, 34252), (36, 34258), (37, 34261), (40, 34267), (48, 34348), (54, 34576), (Start: 59 @34648 has 1 MA's), (Start: 66 @34753 has 69 MA's), (70, 34783), (83, 34843), (99, 34963), (101, 34978), (105, 34999), (107, 35008), (110, 35041), (117, 35065), (136, 35164),

Gene: Vincenzo\_33 Start: 34896, Stop: 35249, Start Num: 67

Candidate Starts for Vincenzo\_33:

(Start: 67 @34896 has 30 MA's), (70, 34917), (75, 34944), (96, 35046), (107, 35082), (108, 35109), (123, 35163), (135, 35229),

Gene: VioletZ\_32 Start: 34247, Stop: 34600, Start Num: 67

Candidate Starts for VioletZ\_32:

(Start: 67 @34247 has 30 MA's), (70, 34268), (75, 34295), (96, 34397), (107, 34433), (123, 34514), (124, 34517), (135, 34580),

Gene: Virapocalypse\_35 Start: 33950, Stop: 34336, Start Num: 65

Candidate Starts for Virapocalypse\_35:

(55, 33809), (Start: 59 @33845 has 1 MA's), (Start: 65 @33950 has 306 MA's), (70, 33989), (78, 34025), (80, 34028), (101, 34136), (106, 34163), (119, 34235), (131, 34295),

Gene: Virgeve\_34 Start: 33730, Stop: 34116, Start Num: 65

Candidate Starts for Virgeve\_34:

(55, 33589), (Start: 59 @33625 has 1 MA's), (Start: 65 @33730 has 306 MA's), (70, 33769), (78, 33805), (80, 33808), (101, 33916), (106, 33943), (119, 34015), (131, 34075),

Gene: Vista\_35 Start: 33963, Stop: 34349, Start Num: 65

Candidate Starts for Vista\_35:

(55, 33822), (Start: 59 @33858 has 1 MA's), (Start: 65 @33963 has 306 MA's), (70, 34002), (78, 34038), (80, 34041), (101, 34149), (106, 34176), (119, 34248), (131, 34308),

Gene: Vivaldi\_35 Start: 33992, Stop: 34378, Start Num: 65

Candidate Starts for Vivaldi\_35:

(55, 33851), (Start: 59 @33887 has 1 MA's), (Start: 65 @33992 has 306 MA's), (70, 34031), (78, 34067), (80, 34070), (101, 34178), (106, 34205), (119, 34277), (131, 34337),

Gene: Vortex\_35 Start: 33669, Stop: 34055, Start Num: 65

Candidate Starts for Vortex\_35:

(55, 33528), (Start: 59 @33564 has 1 MA's), (Start: 65 @33669 has 306 MA's), (70, 33708), (78, 33744), (80, 33747), (101, 33855), (106, 33882), (119, 33954), (131, 34014),

Gene: Waleliano\_32 Start: 34174, Stop: 34527, Start Num: 67

Candidate Starts for Waleliano\_32:

(Start: 67 @34174 has 30 MA's), (70, 34195), (75, 34222), (96, 34324), (107, 34360), (123, 34441), (124, 34444), (135, 34507),

Gene: Wallhey\_34 Start: 33526, Stop: 33912, Start Num: 65

Candidate Starts for Wallhey\_34:

(55, 33385), (Start: 59 @33421 has 1 MA's), (Start: 65 @33526 has 306 MA's), (70, 33565), (78, 33601), (80, 33604), (101, 33712), (106, 33739), (119, 33811), (131, 33871),

Gene: Waterdiva\_35 Start: 33955, Stop: 34341, Start Num: 65

Candidate Starts for Waterdiva\_35:

(55, 33814), (Start: 59 @33850 has 1 MA's), (Start: 65 @33955 has 306 MA's), (70, 33994), (78, 34030), (80, 34033), (101, 34141), (106, 34168), (119, 34240), (131, 34300),

Gene: Weher20\_35 Start: 33954, Stop: 34340, Start Num: 65

Candidate Starts for Weher20\_35:

(55, 33813), (Start: 59 @33849 has 1 MA's), (Start: 65 @33954 has 306 MA's), (70, 33993), (78, 34029), (80, 34032), (101, 34140), (106, 34167), (119, 34239), (131, 34299),

Gene: West99\_35 Start: 34403, Stop: 34792, Start Num: 65

Candidate Starts for West99\_35:



(55, 34262), (Start: 59 @34298 has 1 MA's), (Start: 65 @34403 has 306 MA's), (70, 34442), (78, 34478), (92, 34553), (101, 34589), (106, 34616), (110, 34652), (119, 34688), (121, 34691), (131, 34748), (138, 34781),

Gene: Windsor\_34 Start: 33659, Stop: 34045, Start Num: 65

Candidate Starts for Windsor\_34:

(55, 33518), (Start: 59 @33554 has 1 MA's), (Start: 65 @33659 has 306 MA's), (70, 33698), (78, 33734), (80, 33737), (101, 33845), (106, 33872), (119, 33944), (131, 34004),

Gene: Xavier\_34 Start: 33676, Stop: 34062, Start Num: 65

Candidate Starts for Xavier\_34:

(55, 33535), (Start: 59 @33571 has 1 MA's), (Start: 65 @33676 has 306 MA's), (70, 33715), (78, 33751), (80, 33754), (101, 33862), (106, 33889), (119, 33961), (131, 34021),

Gene: Xincheng\_31 Start: 33629, Stop: 33982, Start Num: 67

Candidate Starts for Xincheng\_31:

(Start: 67 @33629 has 30 MA's), (70, 33650), (75, 33677), (96, 33779), (107, 33815), (123, 33896), (124, 33899), (135, 33962),

Gene: Yahalom\_35 Start: 33854, Stop: 34279, Start Num: 66

Candidate Starts for Yahalom\_35:

(50, 33512), (52, 33623), (Start: 59 @33749 has 1 MA's), (Start: 66 @33854 has 69 MA's), (86, 33965), (88, 33974), (90, 33989), (105, 34103), (107, 34112), (108, 34139), (110, 34145), (115, 34157), (118, 34181), (125, 34199), (136, 34268),

Gene: Yinz\_35 Start: 33880, Stop: 34305, Start Num: 66

Candidate Starts for Yinz\_35:

(Start: 59 @33775 has 1 MA's), (Start: 66 @33880 has 69 MA's), (81, 33958), (86, 33991), (88, 34000), (101, 34108), (105, 34129), (107, 34138), (108, 34165), (110, 34171), (115, 34183), (118, 34207), (125, 34225), (136, 34294),

Gene: Yoshand\_35 Start: 33962, Stop: 34348, Start Num: 65

Candidate Starts for Yoshand\_35:

(55, 33821), (Start: 59 @33857 has 1 MA's), (Start: 65 @33962 has 306 MA's), (70, 34001), (78, 34037), (80, 34040), (101, 34148), (106, 34175), (119, 34247), (131, 34307),

Gene: YouGoGlencoco\_35 Start: 33957, Stop: 34343, Start Num: 65

Candidate Starts for YouGoGlencoco\_35:

(55, 33816), (Start: 59 @33852 has 1 MA's), (Start: 65 @33957 has 306 MA's), (70, 33996), (78, 34032), (80, 34035), (101, 34143), (106, 34170), (119, 34242), (131, 34302),

Gene: Zaider\_36 Start: 34187, Stop: 34573, Start Num: 65

Candidate Starts for Zaider\_36:

(55, 34046), (Start: 59 @34082 has 1 MA's), (Start: 65 @34187 has 306 MA's), (70, 34226), (78, 34262), (80, 34265), (101, 34373), (106, 34400), (119, 34472), (131, 34532),

Gene: Zelda\_35 Start: 34004, Stop: 34390, Start Num: 65

Candidate Starts for Zelda\_35:

(55, 33863), (Start: 59 @33899 has 1 MA's), (Start: 65 @34004 has 306 MA's), (70, 34043), (78, 34079), (80, 34082), (101, 34190), (106, 34217), (119, 34289), (131, 34349),

Gene: Zemanar\_33 Start: 34177, Stop: 34530, Start Num: 67

Candidate Starts for Zemanar\_33:

(Start: 67 @34177 has 30 MA's), (70, 34198), (75, 34225), (96, 34327), (107, 34363), (123, 34444), (124, 34447), (135, 34510),

Gene: Zenteno07\_38 Start: 33261, Stop: 33638, Start Num: 67

Candidate Starts for Zenteno07\_38:

(51, 33021), (56, 33141), (60, 33189), (61, 33195), (Start: 64 @33252 has 2 MA's), (Start: 67 @33261 has 30 MA's), (77, 33330), (83, 33345), (132, 33594),

Gene: Zonia\_35 Start: 33976, Stop: 34362, Start Num: 65

Candidate Starts for Zonia\_35:

(55, 33835), (Start: 59 @33871 has 1 MA's), (Start: 65 @33976 has 306 MA's), (70, 34015), (78, 34051), (80, 34054), (101, 34162), (106, 34189), (119, 34261), (131, 34321),