





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 202564 Report

This analysis was run 03/07/25 on database version 590.

Pham number 202564 has 495 members, 73 are drafts.

Phages represented in each track:

- Track 1 : ABU\_40, Hamish\_40, PhrodoBaggins\_39, Morgushi\_40, Badfish\_40, Olak\_39, Freya\_39, MiniBoss\_40, Horchata\_40, Beaglebox\_39, Fang\_40, Jesabah\_40, Katniss\_40, Mcshane\_39, Schadenfreude\_39, Orion\_40, Mecca\_39, LostAndPhound\_39, Scoot17C\_40, True\_39, Charles1\_40, Colbert\_40, Megatron\_40, Bishoperium\_39, Quisquilliae\_40, Potter\_39, Xavier\_39, Omniscient\_40, IsaacEli\_40, Lulwa\_40, Phipps\_40, Held\_40, Mag7\_39, Slatt\_40, Bluephacebaby\_39, Mulan\_39, LeiMonet\_40, Harvey\_40, Khan1\_40, Pacifista\_39, Lasso\_40, Tooj\_40, KingVeVeVe\_40, Vortex\_40, AltPhacts\_40, RedMaple\_39, Gophee\_40, Mikota\_40, Fozzie\_39, Hartsy\_40, Banjo\_39, KingTut\_31, AngelCake\_39, Orwigg\_39, BlueHusk\_40, Puhltonio\_40, CampRoach\_40, Nyala\_39, Oosterbaan\_40, Craff\_40, Kloppinator\_40, Anderson\_40, Kahve\_39, Matalotodo\_40, Soto\_40, Legolas\_39, Fringe\_40, MRabcd\_39, DirtJuice\_40, Haimas\_40, Zelda\_40, TallGrassMM\_40, Pherdinand\_40, Phergie\_39, Dice\_39, Adriana\_40, Thora\_40, Sheila\_40, Samaymay\_40, Mesmerelda\_40, Hetaeria\_40, Basato\_41, Usavi\_40, Veritas\_39, HenryJackson\_39, Nathan\_41, Haleema\_39, PG1\_40, Simielle\_39, Murdoc\_40, Prickles\_40, Iridoclysis\_40, Orfeu\_39, Giraffe\_40, OSmaximus\_40, Chah\_41, Gwilliam\_40, Yoshand\_40, PhrankReynolds\_39, SilverBell\_40, SDcharge11\_40, OliverWalter\_40, BlackStallion\_40, Podrick\_40, PhenghisKhan\_39, Selr12\_40, KlimbOn\_40, Solosis\_39, Phunky\_40, Skippy\_40, Squiggle\_40, UncleHowie\_40, Burr\_39, Boehler\_40, Eugenia\_40, Serendipity\_40, Childish\_39, BatteryCK\_39, MrPhizzler\_39, Kailash\_40, Ricotta\_39, Maru\_39, LemonSlice\_40, Dingo\_40, ElvisPhasley\_40, Kikipoo\_40, Morty\_40, Chorkpop\_40, Pops\_40, Virapocalypse\_40, Newman\_40, Andre\_40, Phareon\_40, Daffy\_40
- Track 2 : Kwadwo\_39, TooFast2Furius\_41, Manad\_39, Mana\_39, JangoPhett\_40, DoesntMatter\_40, Megamind20\_40, Timmi\_39, Aelin\_39, UAch1\_40, Swish\_40, Roliet\_40, Phamished\_40, JacAttac\_40, SassyCat97\_39, Telesworld\_39, LeeLot\_40, CamL\_40, Lumine\_39, Mesh1\_40, Kimbrough\_40, Daka\_40, ShiVal\_40, YouGoGlencoco\_40, TomBombadil\_40, Cosmolli16\_39, Zaider\_41, DonSanchon\_39, FriarPreacher\_40, HighStump\_39, LuckyMarjie\_39, Rimu\_41, Cannibal\_40, Buckeye\_40, Altwerkus\_39, Cher\_39, Hocus\_39, Pipsqueak\_40, Dione\_39, Antonia\_39, Vivaldi\_40, Nacho\_0040, Cornobble\_39, FugateOSU\_39, Riggan\_40, Numberten\_40, MitKao\_40, FluffyNinja\_40, Mutante\_39, Gareth\_39, PImatters\_40, Placalicious\_39, Waterdiva\_40, Nicole21\_40, Sophia\_39, Jillium\_39, Mosaic\_39, Phleuron\_39, KLucky39\_40, ThreeOh3D2\_40, Crownjwl\_40, QueenBeane\_40, PhatCats2014\_40, Riverton\_39, Vista\_40, Surely\_40, AbsoluteMadLad\_39, Sigman\_40, CheetO\_40, Chipette\_41, Squid\_40, Inverness\_40, Hertubise\_40, MichaelPhcott\_39

- Track 3 : Soile\_40, Brilliant\_40, Schueller\_39, Iridessa\_40, JakeO\_39, Caspiboi\_41, DelRivs\_39
- Track 4 : Spartan300\_40, Eremos\_40, Lulumae\_39, HSavage\_40, Roscoe\_41, Serpentine\_0040, Piglet\_0039, Chunky\_40, Olive\_40, Grand2040\_39, Roy17\_40, Gyarad\_0040
- Track 5 : Chute\_39, Scrick\_40, Keitherie\_40, Robyn\_39, Lopsy\_39, PhatLouie\_40, SirBeauregard\_40, EmpTee\_40, Apizium\_39, Carthage\_38, Swiphy\_41, Chaelin\_40, Coletti\_39, Valjean\_40, Vaishali24\_39, Windsor\_39, Virgeve\_39, Toni\_39, Tomlarah\_40, Frankicide\_40, Suffolk\_40, ProfessorX\_40
- Track 6 : Kwksand96\_39, MelsMeow\_39, Melc17\_40, Ashraf\_39, Emiris\_40, Gwennie1\_40, JDog\_39, Maskar\_39, DaddyDaniels\_40, LasagnaCat\_40, Jiminy\_39, Plata\_40, Struggle\_39, Weher20\_40, Inchworm\_40, Jiraiya\_39, Cornbread\_40, DuchessDung\_38, Dati\_40, Trypo\_40, Oline\_39, PinheadLarry\_40, Doddsville\_40, Thunderbird\_39, ImtiyazSitla\_39, Durga\_40, Duggie\_39
- Track 7 : Longacauda\_39, Pinkman\_39, Zonia\_40
- Track 8 : Magic8\_40, Cobra\_40, CharlieGBrown\_39, Labeouficaum\_39, GeneCoco\_40, Derpp\_39, TyrionL\_39, Etaye\_40
- Track 9 : Wallhey\_39
- Track 10 : Imvubu\_33
- Track 11 : Indlovu\_38
- Track 12 : LilMcDreamy\_36
- Track 13 : BirdsNest\_42
- Track 14 : Hashim76\_43
- Track 15 : Zenteno07\_44
- Track 16 : Tinciduntolum\_42, TA17A\_42, Rhinoforte\_41, LilSmirk\_41, Qyrzula\_38, Eaglehorse\_41, Arbiter\_40, Ares\_41, Lars\_41, MasterPo\_41, FrenchFry\_41, Bananafish\_41, Tres\_41, Holeinone\_41, Hedgerow\_41, Sabella\_40, PrinceCharming\_41, Allegro\_41, Glass\_41, ItsyBitsy1\_41, Kheth\_41, Kaleb\_41, LizLemon\_41, Brownie5\_41, Faze9\_40, Coffee\_41, Kolhan\_41, Godines\_41, Rosebush\_40, Opia\_41
- Track 17 : Boyle\_41, Blocker23\_41, Phantasmagoria\_41, Calamitous\_41, West99\_41
- Track 18 : Lephleur\_41
- Track 19 : Laurie\_40
- Track 20 : Vic9\_00040
- Track 21 : Yahalom\_40, Nozo\_40, Obutu\_40, Morty007\_40, Gadget\_41, Devonte\_40, Shenandoah\_40, Compostia\_41, Jackstina\_37, SynergyX\_40, Baloo\_40, LestyG\_40, SwainyDoc\_40, Phlyer\_40, Mortcellus\_39, Phayeta\_41, Marley1013\_40, Philly\_39, GlenHope\_41, RagingRooster\_40, SlippinJimmy\_40, Halfpint\_39, Chentzyk\_40, Audrey\_40
- Track 22 : Daisy\_40, Rita1961\_40, Corofin\_40, Heathcliff\_40, Casbah\_39, Chandler\_40, Abinghost\_40, OrangeOswald\_40, Olivio\_39, Akoma\_40, MmasiCarm\_40, Chalmers\_40, Briakila\_41, Ben11\_39, HarveySr\_40, RomaT\_40, ChaChing\_40
- Track 23 : Gervas\_40, Marlia\_40, Deenasa\_40, TinyTerror\_40, Kamiyu\_40, Phaedrus\_38, Athena\_41, Yinz\_40, Glubnar\_40, Neos5\_40, Tydolla\_40
- Track 24 : Bernardo\_41
- Track 25 : Kronus\_39
- Track 26 : Hydro\_37, Apex\_37, Mudslide\_37
- Track 27 : JaguarMi\_37, Xincheng\_36
- Track 28 : RawrgerThat\_37, Prince\_37, Waleliano\_37, Austelle\_38, VioletZ\_37
- Track 29 : Mithril\_37, BrownCNA\_38

- Track 30 : GinPorsche\_36, Heath\_36, Antihero\_36, Hally898\_36, Ahwei\_36, Nanao\_36, ChrisnMich\_36, Lambano\_36, Epah\_36, Poster\_36
- Track 31 : Lolalove\_37, Hangman\_37, Fortunato\_37, Magpie\_36
- Track 32 : Nigel\_35
- Track 33 : Fanaw\_36, JAMaL\_37, Zemanar\_38
- Track 34 : Stinger\_35
- Track 35 : BobbyK\_37, Frederick\_37
- Track 36 : QueenPie\_36
- Track 37 : Cooper\_37
- Track 38 : AlanGrant\_38
- Track 39 : Vincenzo\_38
- Track 40 : Acadian\_39, Rita130\_39, EastView9101\_38, Donny\_39, Suigeneris\_39, SirJeffery\_39
- Track 41 : Reprobate\_39
- Track 42 : Mysterious\_41, Nehemiah\_39, Phelemich\_39
- Track 43 : Nangang\_39, Serendipitous\_38, DigitDog\_39, Shenyu\_39, KarasumaRum\_41, StinkyVeggy\_41
- Track 44 : Bae\_38, Rich\_38
- Track 45 : KayaCho\_34, Jolie1\_034
- Track 46 : 39HC\_034, 40BC\_034
- Track 47 : Hosp\_032
- Track 48 : ForDig\_35
- Track 49 : Saguaro\_41
- Track 50 : Thonko\_39
- Track 51 : CRB2\_42
- Track 52 : Funsized\_42
- Track 53 : Knocker\_41
- Track 54 : Rinkes\_41
- Track 55 : Quesadilla\_42
- Track 56 : PenguinLover67\_42
- Track 57 : DonTron\_55, KingstonB\_56, Soos\_51
- Track 58 : Clawz\_55
- Track 59 : Sting\_54
- Track 60 : ColdSoup\_56, Amo99\_56, Jollymon\_56
- Track 61 : Coldpizza\_36
- Track 62 : Axumite\_33, Ligma\_33, Fresco\_33, Shatter\_33
- Track 63 : LittleMunchkin\_35
- Track 64 : Sour\_38
- Track 65 : BiggityBass\_33
- Track 66 : Mariokart\_33
- Track 67 : NHagos\_33, AksarBAT\_33
- Track 68 : MossRose\_35, CloverMinnie\_35
- Track 69 : Yeshua\_35, Wooper\_35
- Track 70 : AnarQue\_35, MakoManhole\_35, CaiB\_35
- Track 71 : AnClar\_34, Yago84\_33, Sisko\_33
- Track 72 : BobRoss2024\_32
- Track 73 : CharlottesWeb\_33
- Track 74 : Jeon\_35, GodPhather\_36
- Track 75 : Cepens\_35, D12\_34, Taptic\_35, PR\_35, Megabear\_35
- Track 76 : Argie\_36
- Track 77 : Tonitrus\_42

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

The start number called the most often in the published annotations is 7, it was called in 248 of the 422 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU\_40, Acadian\_39, Adriana\_40, Ahwei\_36, AltPhacts\_40, Anderson\_40, Andre\_40, AngelCake\_39, Antihero\_36, Apex\_37, Apizium\_39, Ashraf\_39, Athena\_41, Audrey\_40, Austelle\_38, Badfish\_40, Bae\_38, Baloo\_40, Banjo\_39, Basato\_41, BatteryCK\_39, Beaglebox\_39, Bernardo\_41, Bishoperium\_39, BlackStallion\_40, Blocker23\_41, BlueHusk\_40, Bluephacebaby\_39, BobbyK\_37, Bohler\_40, Boyle\_41, Brilliant\_40, BrownCNA\_38, Burr\_39, CRB2\_42, Calamitous\_41, CampRoach\_40, Carthage\_38, Caspiboi\_41, Chaelin\_40, Chah\_41, Charles1\_40, Chentzyk\_40, Childish\_39, Chorkpop\_40, ChrisnMich\_36, Chute\_39, Colbert\_40, Coletti\_39, Compostia\_41, Cooper\_37, Cornbread\_40, Craff\_40, DaddyDaniels\_40, Daffy\_40, Dati\_40, Deenasa\_40, DelRivs\_39, Devonte\_40, Dice\_39, DigitDog\_39, Dingo\_40, DirtJuice\_40, Doddsville\_40, Donny\_39, DuchessDung\_38, Duggie\_39, Durga\_40, EastView9101\_38, ElvisPhasley\_40, Emiris\_40, EmpTee\_40, Epah\_36, Eugenia\_40, Fanaw\_36, Fang\_40, ForDig\_35, Fozzie\_39, Frankicide\_40, Frederick\_37, Freya\_39, Fringe\_40, Funsized\_42, Gadget\_41, Gervas\_40, GinPorsche\_36, Giraffe\_40, GlenHope\_41, Glubnar\_40, Gophee\_40, Gwennie1\_40, Gwilliam\_40, Haimas\_40, Haleema\_39, Halfpint\_39, Hally898\_36, Hamish\_40, Hartsy\_40, Harvey\_40, Hashim76\_43, Heath\_36, Held\_40, HenryJackson\_39, Hetaeria\_40, Horchata\_40, Hosp\_032, Hydro\_37, ImtiyazSitla\_39, Imvubu\_33, Inchworm\_40, Indlovu\_38, Iridessa\_40, Iridoclysis\_40, IsaacEli\_40, JAMaL\_37, JDog\_39, Jackstina\_37, JaguarMi\_37, JakeO\_39, Jesabah\_40, Jiminy\_39, Jiraiya\_39, Jolie1\_034, Kahve\_39, Kailash\_40, Kamiyu\_40, KarasumaRum\_41, Katniss\_40, KayaCho\_34, Keitherie\_40, Khan1\_40, Kikipoo\_40, KingTut\_31, KingVeVeVe\_40, KlimbOn\_40, Kloppinator\_40, Kwksand96\_39, Lambano\_36, LasagnaCat\_40, Lasso\_40, Legolas\_39, LeiMonet\_40, LemonSlice\_40, LestyG\_40, LilMcDreamy\_36, Longacauda\_39, Lopsy\_39, LostAndPhound\_39, Lulwa\_40, MRabcd\_39, Mag7\_39, Marley1013\_40, Marlia\_40, Maru\_39, Maskar\_39, Matalotodo\_40, Mcshane\_39, Mecca\_39, Megatron\_40, Melc17\_40, MelsMeow\_39, Mesmerelda\_40, Mikota\_40, MiniBoss\_40, Mithril\_37, Morgushi\_40, Mortcellus\_39, Morty007\_40, Morty\_40, MrPhizzler\_39, Mudslide\_37, Mulan\_39, Murdoc\_40, Mysterious\_41, Nanao\_36, Nangang\_39, Nathan\_41, Nehemiah\_39, Neos5\_40, Newman\_40, Nigel\_35, Nozo\_40, Nyala\_39, OSmaximus\_40, Obutu\_40, Olak\_39, Oline\_39, OliverWalter\_40, Omniscient\_40, Oosterbaan\_40, Orfeu\_39, Orion\_40, Orwigg\_39, PG1\_40, Pacifista\_39, PenguinLover67\_42, Phaedrus\_38, Phantasmagoria\_41, Phareon\_40, PhatLouie\_40, Phayeta\_41, Phelemich\_39, PhenghisKhan\_39, Pherdinand\_40, Phergie\_39, Philly\_39, Phipps\_40, Phlyer\_40, PhrankReynolds\_39, PhrodoBaggins\_39, Phunky\_40, PinheadLarry\_40, Pinkman\_39, Plata\_40, Podrick\_40, Pops\_40, Poster\_36, Potter\_39, Prickles\_40, Prince\_37, ProfessorX\_40, Puhltonio\_40, QueenPie\_36, Quisquilliae\_40, RagingRooster\_40, RawrgerThat\_37, RedMaple\_39, Rich\_38, Ricotta\_39, Rinkes\_41, Rita130\_39, Robyn\_39, SDcharge11\_40, Saguaro\_41, Samaymay\_40, Schadenfreude\_39, Schueller\_39, Scoot17C\_40, Scrick\_40, Selr12\_40, Serendipitous\_38, Serendipity\_40, Sheila\_40, Shenandoah\_40, Shenyu\_39, SilverBell\_40, Simielle\_39, SirBeauregard\_40, SirJeffery\_39, Skippy\_40, Slatt\_40, SlippinJimmy\_40, Soile\_40, Solosis\_39, Soto\_40, Squiggle\_40, StinkyVeggy\_41, Struggle\_39, Suffolk\_40, Suigeneris\_39, SwainyDoc\_40, Swiphy\_41, SynergyX\_40, TallGrassMM\_40, Thonko\_39, Thora\_40,

Thunderbird\_39, TinyTerror\_40, Tomlarah\_40, Toni\_39, Tooj\_40, True\_39, Trypo\_40, Tydolla\_40, UncleHowie\_40, Usavi\_40, Vaishali24\_39, Valjean\_40, Veritas\_39, Vincenzo\_38, VioletZ\_37, Virapocalypse\_40, Virgeve\_39, Vortex\_40, Waleliano\_37, Weher20\_40, West99\_41, Windsor\_39, Xavier\_39, Xincheng\_36, Yahalom\_40, Yinz\_40, Yoshand\_40, Zelda\_40, Zemanar\_38, Zenteno07\_44, Zonia\_40,

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

- 39HC\_034, 40BC\_034, AbsoluteMadLad\_39, Aelin\_39, AlanGrant\_38, Allegro\_41, Altwerkus\_39, Antonia\_39, Arbiter\_40, Ares\_41, Bananafish\_41, BirdsNest\_42, Brownie5\_41, Buckeye\_40, CamL\_40, Cannibal\_40, CharlieGBrown\_39, CheetO\_40, Cher\_39, Chipette\_41, Chunky\_40, Cobra\_40, Coffee\_41, Cornobble\_39, Cosmolli16\_39, Crownjwl\_40, Daka\_40, Derpp\_39, Dione\_39, DoesntMatter\_40, DonSanchon\_39, Eaglehorse\_41, Eremos\_40, Etaye\_40, Faze9\_40, FluffyNinja\_40, Fortunato\_37, FrenchFry\_41, FriarPreacher\_40, FugateOSU\_39, Gareth\_39, GeneCoco\_40, Glass\_41, Godines\_41, Grand2040\_39, Gyarad\_0040, HSavage\_40, Hangman\_37, Hedgerow\_41, Hertubise\_40, HighStump\_39, Hocus\_39, Holeinone\_41, Inverness\_40, ItsyBitsy1\_41, JacAttac\_40, JangoPhett\_40, Jillium\_39, KLucky39\_40, Kaleb\_41, Kheth\_41, Kimbrough\_40, Knocker\_41, Kolhan\_41, Kronus\_39, Kwadwo\_39, Labeouficaum\_39, Lars\_41, Laurie\_40, LeeLot\_40, Lephleur\_41, LilSmirk\_41, LizLemon\_41, Lolalove\_37, LuckyMarjie\_39, Lulumae\_39, Lumine\_39, Magic8\_40, Magpie\_36, Mana\_39, Manad\_39, MasterPo\_41, Megamind20\_40, Mesh1\_40, MichaelPhcott\_39, MitKao\_40, Mosaic\_39, Mutante\_39, Nacho\_0040, Nicole21\_40, Numberten\_40, Olive\_40, Opia\_41, Phamished\_40, PhatCats2014\_40, Phleuron\_39, Piglet\_0039, Pipsqueak\_40, Placalicious\_39, Plmatters\_40, PrinceCharming\_41, QueenBeane\_40, Quesadilla\_42, Qyrzula\_38, Reprobate\_39, Rhinoforte\_41, Riggan\_40, Rimu\_41, Riverton\_39, Roliet\_40, Roscoe\_41, Rosebush\_40, Roy17\_40, Sabella\_40, SassyCat97\_39, Serpentine\_0040, ShiVal\_40, Sigman\_40, Sophia\_39, Spartan300\_40, Squid\_40, Stinger\_35, Surely\_40, Swish\_40, TA17A\_42, Telesworld\_39, ThreeOh3D2\_40, Timmi\_39, Tinciduntolum\_42, TomBombadil\_40, TooFast2Furius\_41, Tres\_41, TyrionL\_39, UAch1\_40, Vic9\_00040, Vista\_40, Vivaldi\_40, Wallhey\_39, Waterdiva\_40, YouGoGlencoco\_40, Zaider\_41,

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

- Abinghost\_40, Akoma\_40, AksarBAT\_33, Amo99\_56, AnClar\_34, AnarQue\_35, Argie\_36, Axumite\_33, Ben11\_39, BiggityBass\_33, BobRoss2024\_32, Briakila\_41, CaiB\_35, Casbah\_39, Cepens\_35, ChaChing\_40, Chalmers\_40, Chandler\_40, CharlottesWeb\_33, Clawz\_55, CloverMinnie\_35, ColdSoup\_56, Coldpizza\_36, Corofin\_40, D12\_34, Daisy\_40, DonTron\_55, Fresco\_33, GodPhather\_36, HarveySr\_40, Heathcliff\_40, Jeon\_35, Jollymon\_56, KingstonB\_56, Ligma\_33, LittleMunchkin\_35, MakoManhole\_35, Mariokart\_33, Megabear\_35, MmasiCarm\_40, MossRose\_35, NHagos\_33, Olivio\_39, OrangeOswald\_40, PR\_35, Rita1961\_40, RomaT\_40, Shatter\_33, Sisko\_33, Soos\_51, Sour\_38, Sting\_54, Taptic\_35, Tonitrus\_42, Wooper\_35, Yago84\_33, Yeshua\_35,

### Summary by start number:

Start 4:

- Found in 39 of 495 ( 7.9% ) of genes in pham
- Manual Annotations of this start: 27 of 422
- Called 79.5% of time when present
- Phage (with cluster) where this start called: Allegro\_41 (B2), Arbiter\_40 (B2), Ares\_41 (B2), Bananafish\_41 (B2), Brownie5\_41 (B2), Coffee\_41 (B2),

Eaglehorse\_41 (B2), Faze9\_40 (B2), FrenchFry\_41 (B2), Glass\_41 (B2), Godines\_41 (B2), Hedgerow\_41 (B2), Holeinone\_41 (B2), ItsyBitsy1\_41 (B2), Kaleb\_41 (B2), Kheth\_41 (B2), Kolhan\_41 (B2), Lars\_41 (B2), Laurie\_40 (B2), LilSmirk\_41 (B2), LizLemon\_41 (B2), MasterPo\_41 (B2), Opia\_41 (B2), PrinceCharming\_41 (B2), Qyrzula\_38 (B2), Rhinoforte\_41 (B2), Rosebush\_40 (B2), Sabella\_40 (B2), TA17A\_42 (B2), Tinciduntolum\_42 (B2), Tres\_41 (B2),

#### Start 5:

- Found in 22 of 495 ( 4.4% ) of genes in pham
- Manual Annotations of this start: 18 of 422
- Called 95.5% of time when present
- Phage (with cluster) where this start called: AksarBAT\_33 (DR), AnClar\_34 (DR), AnarQue\_35 (DR), Axumite\_33 (DR), BiggityBass\_33 (DR), CaiB\_35 (DR), CharlottesWeb\_33 (DR), CloverMinnie\_35 (DR), Fresco\_33 (DR), Ligma\_33 (DR), LittleMunchkin\_35 (DR), MakoManhole\_35 (DR), Mariokart\_33 (DR), MossRose\_35 (DR), NHagos\_33 (DR), Shatter\_33 (DR), Sisko\_33 (DR), Sour\_38 (DR), Wooper\_35 (DR), Yago84\_33 (DR), Yeshua\_35 (DR),

#### Start 6:

- Found in 395 of 495 ( 79.8% ) of genes in pham
- Manual Annotations of this start: 101 of 422
- Called 27.3% of time when present
- Phage (with cluster) where this start called: 39HC\_034 (B6), 40BC\_034 (B6), AbsoluteMadLad\_39 (B1), Aelin\_39 (B1), Altwerkus\_39 (B1), Antonia\_39 (B1), BirdsNest\_42 (B13), Buckeye\_40 (B1), CamL\_40 (B1), Cannibal\_40 (B1), CharlieGBrown\_39 (B1), CheetO\_40 (B1), Cher\_39 (B1), Chipette\_41 (B1), Chunky\_40 (B1), Cobra\_40 (B1), Cornobble\_39 (B1), Cosmolli16\_39 (B1), Crownjwl\_40 (B1), Daka\_40 (B1), Derpp\_39 (B1), Dione\_39 (B1), DoesntMatter\_40 (B1), DonSanchon\_39 (B1), Eremos\_40 (B1), Etaye\_40 (B1), FluffyNinja\_40 (B1), Fortunato\_37 (B4), FriarPreacher\_40 (B1), FugateOSU\_39 (B1), Gareth\_39 (B1), GeneCoco\_40 (B1), Grand2040\_39 (B1), Gyrad\_0040 (B1), HSavage\_40 (B1), Hangman\_37 (B4), Hertubise\_40 (B1), HighStump\_39 (B1), Hocus\_39 (B1), Inverness\_40 (B1), JacAttac\_40 (B1), JangoPhett\_40 (B1), Jillium\_39 (B1), KLucky39\_40 (B1), Kimbrough\_40 (B1), Knocker\_41 (B9), Kwadwo\_39 (B1), Labeouficaum\_39 (B1), LeeLot\_40 (B1), Lephleur\_41 (B2), Lolalove\_37 (B4), LuckyMarjie\_39 (B1), Lulumae\_39 (B1), Lumine\_39 (B1), Magic8\_40 (B1), Magpie\_36 (B4), Mana\_39 (B1), Manad\_39 (B1), Megamind20\_40 (B1), Mesh1\_40 (B1), MichaelPhcott\_39 (B1), MitKao\_40 (B1), Mosaic\_39 (B1), Mutante\_39 (B1), Nacho\_0040 (B1), Nicole21\_40 (B1), Numberten\_40 (B1), Olive\_40 (B1), Phamished\_40 (B1), PhatCats2014\_40 (B1), Phleuron\_39 (B1), Piglet\_0039 (B1), Pipsqueak\_40 (B1), Placalicious\_39 (B1), Plmatters\_40 (B1), QueenBeane\_40 (B1), Quesadilla\_42 (B9), Reprobate\_39 (B5), Riggan\_40 (B1), Rimu\_41 (B1), Riverton\_39 (B1), Roliet\_40 (B1), Roscoe\_41 (B1), Roy17\_40 (B1), SassyCat97\_39 (B1), Serpentine\_0040 (B1), ShiVal\_40 (B1), Sigman\_40 (B1), Sophia\_39 (B1), Spartan300\_40 (B1), Squid\_40 (B1), Stinger\_35 (B4), Surely\_40 (B1), Swish\_40 (B1), Telesworld\_39 (B1), ThreeOh3D2\_40 (B1), Timmi\_39 (B1), TomBombadil\_40 (B1), TooFast2Furius\_41 (B1), TyrionL\_39 (B1), UAch1\_40 (B1), Vic9\_00040 (B2), Vista\_40 (B1), Vivaldi\_40 (B1), Wallhey\_39 (B1), Waterdiva\_40 (B1), YouGoGlencoco\_40 (B1), Zaider\_41 (B1),

#### Start 7:

- Found in 438 of 495 ( 88.5% ) of genes in pham
- Manual Annotations of this start: 248 of 422



- Called 67.8% of time when present
- Phage (with cluster) where this start called: ABU\_40 (B1), Acadian\_39 (B5), Adriana\_40 (B1), Ahwei\_36 (B4), AltPhacts\_40 (B1), Anderson\_40 (B1), Andre\_40 (B1), AngelCake\_39 (B1), Antihero\_36 (B4), Apex\_37 (B4), Apizium\_39 (B1), Ashraf\_39 (B1), Athena\_41 (B3), Audrey\_40 (B3), Austelle\_38 (B4), Badfish\_40 (B1), Bae\_38 (B5), Baloo\_40 (B3), Banjo\_39 (B1), Basato\_41 (B1), BatteryCK\_39 (B1), Beaglebox\_39 (B1), Bernardo\_41 (B3), Bishoperium\_39 (B1), BlackStallion\_40 (B1), Blocker23\_41 (B2), BlueHusk\_40 (B1), Bluephacebaby\_39 (B1), BobbyK\_37 (B4), Boehler\_40 (B1), Boyle\_41 (B2), Brilliant\_40 (B1), BrownCNA\_38 (B4), Burr\_39 (B1), CRB2\_42 (B9), Calamitous\_41 (B2), CampRoach\_40 (B1), Carthage\_38 (B1), Caspiboi\_41 (B1), Chaelin\_40 (B1), Chah\_41 (B1), Charles1\_40 (B1), Chentzyk\_40 (B3), Childish\_39 (B1), Chorkpop\_40 (B1), ChrisnMich\_36 (B4), Chute\_39 (B1), Colbert\_40 (B1), Coletti\_39 (B1), Compostia\_41 (B3), Cooper\_37 (B4), Cornbread\_40 (B1), Craff\_40 (B1), DaddyDaniels\_40 (B1), Daffy\_40 (B1), Dati\_40 (B1), Deenasa\_40 (B3), DelRivs\_39 (B1), Devonte\_40 (B3), Dice\_39 (B1), DigitDog\_39 (B5), Dingo\_40 (B1), DirtJuice\_40 (B1), Doddsville\_40 (B1), Donny\_39 (B5), DuchessDung\_38 (B1), Duggie\_39 (B1), Durga\_40 (B1), EastView9101\_38 (B5), ElvisPhasley\_40 (B1), Emiris\_40 (B1), EmpTee\_40 (B1), Epah\_36 (B4), Eugenia\_40 (B1), Fanaw\_36 (B4), Fang\_40 (B1), ForDig\_35 (B6), Fozzie\_39 (B1), Frankicide\_40 (B1), Frederick\_37 (B4), Freya\_39 (B1), Fringe\_40 (B1), Funsized\_42 (B9), Gadget\_41 (B3), Gervas\_40 (B3), GinPorsche\_36 (B4), Giraffe\_40 (B1), GlenHope\_41 (B3), Glubnar\_40 (B3), Gophee\_40 (B1), Gwennie1\_40 (B1), Gwilliam\_40 (B1), Haimas\_40 (B1), Haleema\_39 (B1), Halfpint\_39 (B3), Hally898\_36 (B4), Hamish\_40 (B1), Hartsy\_40 (B1), Harvey\_40 (B1), Hashim76\_43 (B13), Heath\_36 (B4), Held\_40 (B1), HenryJackson\_39 (B1), Hetaeria\_40 (B1), Horchata\_40 (B1), Hosp\_032 (B6), Hydro\_37 (B4), ImtiyazSitla\_39 (B1), Imvubu\_33 (B10), Inchworm\_40 (B1), Indlovu\_38 (B11), Iridessa\_40 (B1), Iridoclysis\_40 (B1), IsaacEli\_40 (B1), JAMaL\_37 (B4), JDog\_39 (B1), Jackstina\_37 (B3), JaguarMi\_37 (B4), JakeO\_39 (B1), Jesabah\_40 (B1), Jiminy\_39 (B1), Jiraiya\_39 (B1), Jolie1\_034 (B6), Kahve\_39 (B1), Kailash\_40 (B1), Kamiyu\_40 (B3), KarasumaRum\_41 (B5), Katniss\_40 (B1), KayaCho\_34 (B6), Keitherie\_40 (B1), Khan1\_40 (B1), Kikipoo\_40 (B1), KingTut\_31 (B1), KingVeVeVe\_40 (B1), KlimbOn\_40 (B1), Kloppinator\_40 (B1), Kwksand96\_39 (B1), Lambano\_36 (B4), LasagnaCat\_40 (B1), Lasso\_40 (B1), Legolas\_39 (B1), LeiMonet\_40 (B1), LemonSlice\_40 (B1), LestyG\_40 (B3), LilMcDreamy\_36 (B12), Longacauda\_39 (B1), Lopsy\_39 (B1), LostAndPhound\_39 (B1), Lulwa\_40 (B1), MRabcd\_39 (B1), Mag7\_39 (B1), Marley1013\_40 (B3), Marlia\_40 (B3), Maru\_39 (B1), Maskar\_39 (B1), Matalotodo\_40 (B1), Mcshane\_39 (B1), Mecca\_39 (B1), Megatron\_40 (B1), Melc17\_40 (B1), MelsMeow\_39 (B1), Mesmerelda\_40 (B1), Mikota\_40 (B1), MiniBoss\_40 (B1), Mithril\_37 (B4), Morgushi\_40 (B1), Mortcellus\_39 (B3), Morty007\_40 (B3), Morty\_40 (B1), MrPhizzler\_39 (B1), Mudslide\_37 (B4), Mulan\_39 (B1), Murdoc\_40 (B1), Mysterious\_41 (B5), Nanao\_36 (B4), Nangang\_39 (B5), Nathan\_41 (B1), Nehemiah\_39 (B5), Neos5\_40 (B3), Newman\_40 (B1), Nigel\_35 (B4), Nozo\_40 (B3), Nyala\_39 (B1), OSmaximus\_40 (B1), Obutu\_40 (B3), Olak\_39 (B1), Oline\_39 (B1), OliverWalter\_40 (B1), Omniscient\_40 (B1), Oosterbaan\_40 (B1), Orfeu\_39 (B1), Orion\_40 (B1), Orwigg\_39 (B1), PG1\_40 (B1), Pacifista\_39 (B1), PenguinLover67\_42 (B9), Phaedrus\_38 (B3), Phantasmagoria\_41 (B2), Phareon\_40 (B1), PhatLouie\_40 (B1), Phayeta\_41 (B3), Phelemich\_39 (B5), PhenghisKhan\_39 (B1), Pherdinand\_40 (B1), Phergie\_39 (B1), Philly\_39 (B3), Phipps\_40 (B1), Phlyer\_40 (B3), PhrankReynolds\_39 (B1), PhrodoBaggins\_39 (B1), Phunky\_40 (B1), PinheadLarry\_40 (B1), Pinkman\_39 (B1), Plata\_40 (B1), Podrick\_40 (B1), Pops\_40 (B1), Poster\_36 (B4), Potter\_39 (B1), Prickles\_40 (B1), Prince\_37 (B4), ProfessorX\_40 (B1), Puhltonio\_40 (B1), QueenPie\_36 (B4), Quisquilliae\_40 (B1),

RagingRooster\_40 (B3), RawrgerThat\_37 (B4), RedMaple\_39 (B1), Rich\_38 (B5), Ricotta\_39 (B1), Rinkes\_41 (B9), Rita130\_39 (B5), Robyn\_39 (B1), SDcharge11\_40 (B1), Saguaro\_41 (B7), Samaymay\_40 (B1), Schadenfreude\_39 (B1), Schueller\_39 (B1), Scoot17C\_40 (B1), Scrick\_40 (B1), Selr12\_40 (B1), Serendipitous\_38 (B5), Serendipity\_40 (B1), Sheila\_40 (B1), Shenandoah\_40 (B3), Shenyu\_39 (B5), SilverBell\_40 (B1), Simielle\_39 (B1), SirBeauregard\_40 (B1), SirJeffery\_39 (B5), Skippy\_40 (B1), Slatt\_40 (B1), SlippinJimmy\_40 (B3), Soile\_40 (B1), Solosis\_39 (B1), Soto\_40 (B1), Squiggle\_40 (B1), StinkyVeggy\_41 (B5), Struggle\_39 (B1), Suffolk\_40 (B1), Suigeneris\_39 (B5), SwainyDoc\_40 (B3), Swiphy\_41 (B1), SynergyX\_40 (B3), TallGrassMM\_40 (B1), Thonko\_39 (B8), Thora\_40 (B1), Thunderbird\_39 (B1), TinyTerror\_40 (B3), Tomlarah\_40 (B1), Toni\_39 (B1), Tooj\_40 (B1), True\_39 (B1), Trypo\_40 (B1), Tydolla\_40 (B3), UncleHowie\_40 (B1), Usavi\_40 (B1), Vaishali24\_39 (B1), Valjean\_40 (B1), Veritas\_39 (B1), Vincenzo\_38 (B4), VioletZ\_37 (B4), Virapocalypse\_40 (B1), Virgeve\_39 (B1), Vortex\_40 (B1), Waleliano\_37 (B4), Weher20\_40 (B1), West99\_41 (B2), Windsor\_39 (B1), Xavier\_39 (B1), Xincheng\_36 (B4), Yahalom\_40 (B3), Yinz\_40 (B3), Yoshand\_40 (B1), Zelda\_40 (B1), Zemanar\_38 (B4), Zenteno07\_44 (B13), Zonia\_40 (B1),

#### Start 9:

- Found in 6 of 495 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 1 of 422
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AlanGrant\_38 (B4), BobRoss2024\_32 (DR), Coldpizza\_36 (DR),

#### Start 12:

- Found in 14 of 495 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 4 of 422
- Called 64.3% of time when present
- Phage (with cluster) where this start called: Amo99\_56 (CP), Clawz\_55 (CP), ColdSoup\_56 (CP), DonTron\_55 (CP), Jollymon\_56 (CP), KingstonB\_56 (CP), Soos\_51 (CP), Sting\_54 (CP), Tonitrus\_42 (singleton),

#### Start 16:

- Found in 410 of 495 ( 82.8% ) of genes in pham
- Manual Annotations of this start: 8 of 422
- Called 2.0% of time when present
- Phage (with cluster) where this start called: Argie\_36 (W), Cepens\_35 (W), D12\_34 (W), GodPhather\_36 (W), Jeon\_35 (W), Megabear\_35 (W), PR\_35 (W), Taptic\_35 (W),

#### Start 21:

- Found in 414 of 495 ( 83.6% ) of genes in pham
- Manual Annotations of this start: 15 of 422
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Abinghost\_40 (B3), Akoma\_40 (B3), Ben11\_39 (B3), Briakila\_41 (B3), Casbah\_39 (B3), ChaChing\_40 (B3), Chalmers\_40 (B3), Chandler\_40 (B3), Corofin\_40 (B3), Daisy\_40 (B3), HarveySr\_40 (B3), Heathcliff\_40 (B3), Kronus\_39 (B3), MmasiCarm\_40 (B3), Olivio\_39 (B3), OrangeOswald\_40 (B3), Rita1961\_40 (B3), RomaT\_40 (B3),

#### Summary by clusters:

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

Info for manual annotations of cluster B1:

- Start number 6 was manually annotated 90 times for cluster B1.
- Start number 7 was manually annotated 175 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 7 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 7 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 7 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 6 was manually annotated 1 time for cluster B13.
- Start number 7 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 4 was manually annotated 27 times for cluster B2.
- Start number 6 was manually annotated 2 times for cluster B2.
- Start number 7 was manually annotated 5 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 7 was manually annotated 29 times for cluster B3.
- Start number 21 was manually annotated 15 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 6 was manually annotated 5 times for cluster B4.
- Start number 7 was manually annotated 19 times for cluster B4.
- Start number 9 was manually annotated 1 time for cluster B4.

Info for manual annotations of cluster B5:

- Start number 6 was manually annotated 1 time for cluster B5.
- Start number 7 was manually annotated 8 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 7 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 7 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

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

Info for manual annotations of cluster B9:

- Start number 6 was manually annotated 2 times for cluster B9.
- Start number 7 was manually annotated 4 times for cluster B9.

Info for manual annotations of cluster CP:

- Start number 12 was manually annotated 3 times for cluster CP.

Info for manual annotations of cluster DR:

•Start number 5 was manually annotated 18 times for cluster DR.

Info for manual annotations of cluster W:

•Start number 16 was manually annotated 8 times for cluster W.

### **Gene Information:**

Gene: 39HC\_034 Start: 34919, Stop: 35236, Start Num: 6

Candidate Starts for 39HC\_034:

(Start: 6 @34919 has 101 MA's), (Start: 7 @34922 has 248 MA's), (Start: 16 @34985 has 8 MA's), (18, 34994), (19, 35003), (Start: 21 @35012 has 15 MA's), (24, 35024), (48, 35138), (54, 35159), (57, 35192),

Gene: 40BC\_034 Start: 34919, Stop: 35236, Start Num: 6

Candidate Starts for 40BC\_034:

(Start: 6 @34919 has 101 MA's), (Start: 7 @34922 has 248 MA's), (Start: 16 @34985 has 8 MA's), (18, 34994), (19, 35003), (Start: 21 @35012 has 15 MA's), (24, 35024), (48, 35138), (54, 35159), (57, 35192),

Gene: ABU\_40 Start: 36604, Stop: 36915, Start Num: 7

Candidate Starts for ABU\_40:

(Start: 6 @36601 has 101 MA's), (Start: 7 @36604 has 248 MA's), (Start: 16 @36667 has 8 MA's), (19, 36682), (Start: 21 @36691 has 15 MA's), (22, 36694), (30, 36730), (48, 36817), (65, 36907),

Gene: Abinghost\_40 Start: 37346, Stop: 37582, Start Num: 21

Candidate Starts for Abinghost\_40:

(2, 36971), (Start: 21 @37346 has 15 MA's), (49, 37469), (54, 37490), (60, 37550), (63, 37559),

Gene: AbsoluteMadLad\_39 Start: 36610, Stop: 36924, Start Num: 6

Candidate Starts for AbsoluteMadLad\_39:

(Start: 6 @36610 has 101 MA's), (Start: 7 @36613 has 248 MA's), (Start: 16 @36676 has 8 MA's), (19, 36691), (Start: 21 @36700 has 15 MA's), (22, 36703), (30, 36739), (48, 36826), (65, 36916),

Gene: Acadian\_39 Start: 37200, Stop: 37520, Start Num: 7

Candidate Starts for Acadian\_39:

(Start: 6 @37197 has 101 MA's), (Start: 7 @37200 has 248 MA's), (Start: 16 @37263 has 8 MA's), (18, 37269), (19, 37278), (Start: 21 @37287 has 15 MA's), (23, 37296), (26, 37308), (60, 37491),

Gene: Adriana\_40 Start: 36602, Stop: 36913, Start Num: 7

Candidate Starts for Adriana\_40:

(Start: 6 @36599 has 101 MA's), (Start: 7 @36602 has 248 MA's), (Start: 16 @36665 has 8 MA's), (19, 36680), (Start: 21 @36689 has 15 MA's), (22, 36692), (30, 36728), (48, 36815), (65, 36905),

Gene: Aelin\_39 Start: 36165, Stop: 36479, Start Num: 6

Candidate Starts for Aelin\_39:

(Start: 6 @36165 has 101 MA's), (Start: 7 @36168 has 248 MA's), (Start: 16 @36231 has 8 MA's), (19, 36246), (Start: 21 @36255 has 15 MA's), (22, 36258), (30, 36294), (48, 36381), (65, 36471),

Gene: Ahwei\_36 Start: 35900, Stop: 36211, Start Num: 7

Candidate Starts for Ahwei\_36:

(Start: 6 @35897 has 101 MA's), (Start: 7 @35900 has 248 MA's), (Start: 16 @35963 has 8 MA's), (19, 35978), (20, 35984), (Start: 21 @35987 has 15 MA's), (24, 35999), (30, 36026), (38, 36065), (47, 36110), (48, 36113), (54, 36134), (57, 36167),

Gene: Akoma\_40 Start: 37350, Stop: 37586, Start Num: 21

Candidate Starts for Akoma\_40:

(2, 36975), (Start: 21 @37350 has 15 MA's), (49, 37473), (54, 37494), (60, 37554), (63, 37563),

Gene: AksarBAT\_33 Start: 30196, Stop: 30510, Start Num: 5

Candidate Starts for AksarBAT\_33:

(Start: 5 @30196 has 18 MA's), (23, 30313), (25, 30322), (28, 30331), (57, 30469),

Gene: AlanGrant\_38 Start: 37675, Stop: 37962, Start Num: 9

Candidate Starts for AlanGrant\_38:

(Start: 6 @37648 has 101 MA's), (Start: 7 @37651 has 248 MA's), (Start: 9 @37675 has 1 MA's), (Start: 16 @37714 has 8 MA's), (19, 37729), (20, 37735), (Start: 21 @37738 has 15 MA's), (24, 37750), (26, 37759), (30, 37777), (38, 37816), (54, 37885), (57, 37918),

Gene: Allegro\_41 Start: 37726, Stop: 38091, Start Num: 4

Candidate Starts for Allegro\_41:

(Start: 4 @37726 has 27 MA's), (Start: 6 @37768 has 101 MA's), (Start: 7 @37771 has 248 MA's), (11, 37807), (Start: 16 @37834 has 8 MA's), (19, 37849), (24, 37870), (32, 37909), (56, 38032), (57, 38044), (62, 38074),

Gene: AltPhacts\_40 Start: 36591, Stop: 36902, Start Num: 7

Candidate Starts for AltPhacts\_40:

(Start: 6 @36588 has 101 MA's), (Start: 7 @36591 has 248 MA's), (Start: 16 @36654 has 8 MA's), (19, 36669), (Start: 21 @36678 has 15 MA's), (22, 36681), (30, 36717), (48, 36804), (65, 36894),

Gene: Altwerkus\_39 Start: 36289, Stop: 36603, Start Num: 6

Candidate Starts for Altwerkus\_39:

(Start: 6 @36289 has 101 MA's), (Start: 7 @36292 has 248 MA's), (Start: 16 @36355 has 8 MA's), (19, 36370), (Start: 21 @36379 has 15 MA's), (22, 36382), (30, 36418), (48, 36505), (65, 36595),

Gene: Amo99\_56 Start: 30719, Stop: 30940, Start Num: 12

Candidate Starts for Amo99\_56:

(Start: 12 @30719 has 4 MA's), (25, 30785), (26, 30788), (33, 30803), (55, 30881), (58, 30911), (60, 30932),

Gene: AnClar\_34 Start: 32553, Stop: 32864, Start Num: 5

Candidate Starts for AnClar\_34:

(3, 32346), (Start: 5 @32553 has 18 MA's), (27, 32685), (28, 32688), (57, 32823),

Gene: AnarQue\_35 Start: 31659, Stop: 31973, Start Num: 5

Candidate Starts for AnarQue\_35:

(Start: 5 @31659 has 18 MA's), (Start: 12 @31719 has 4 MA's), (27, 31791), (28, 31794), (29, 31803), (46, 31875), (57, 31932),

Gene: Anderson\_40 Start: 36597, Stop: 36908, Start Num: 7

Candidate Starts for Anderson\_40:

(Start: 6 @36594 has 101 MA's), (Start: 7 @36597 has 248 MA's), (Start: 16 @36660 has 8 MA's), (19, 36675), (Start: 21 @36684 has 15 MA's), (22, 36687), (30, 36723), (48, 36810), (65, 36900),

Gene: Andre\_40 Start: 36596, Stop: 36907, Start Num: 7

Candidate Starts for Andre\_40:

(Start: 6 @36593 has 101 MA's), (Start: 7 @36596 has 248 MA's), (Start: 16 @36659 has 8 MA's), (19, 36674), (Start: 21 @36683 has 15 MA's), (22, 36686), (30, 36722), (48, 36809), (65, 36899),

Gene: AngelCake\_39 Start: 36616, Stop: 36927, Start Num: 7

Candidate Starts for AngelCake\_39:

(Start: 6 @36613 has 101 MA's), (Start: 7 @36616 has 248 MA's), (Start: 16 @36679 has 8 MA's), (19, 36694), (Start: 21 @36703 has 15 MA's), (22, 36706), (30, 36742), (48, 36829), (65, 36919),

Gene: Antihero\_36 Start: 35900, Stop: 36211, Start Num: 7

Candidate Starts for Antihero\_36:

(Start: 6 @35897 has 101 MA's), (Start: 7 @35900 has 248 MA's), (Start: 16 @35963 has 8 MA's), (19, 35978), (20, 35984), (Start: 21 @35987 has 15 MA's), (24, 35999), (30, 36026), (38, 36065), (47, 36110), (48, 36113), (54, 36134), (57, 36167),

Gene: Antonia\_39 Start: 36165, Stop: 36479, Start Num: 6

Candidate Starts for Antonia\_39:

(Start: 6 @36165 has 101 MA's), (Start: 7 @36168 has 248 MA's), (Start: 16 @36231 has 8 MA's), (19, 36246), (Start: 21 @36255 has 15 MA's), (22, 36258), (30, 36294), (48, 36381), (65, 36471),

Gene: Apex\_37 Start: 37106, Stop: 37417, Start Num: 7

Candidate Starts for Apex\_37:

(Start: 6 @37103 has 101 MA's), (Start: 7 @37106 has 248 MA's), (Start: 16 @37169 has 8 MA's), (19, 37184), (20, 37190), (Start: 21 @37193 has 15 MA's), (24, 37205), (30, 37232), (38, 37271), (47, 37316), (48, 37319), (57, 37373), (60, 37397),

Gene: Apizium\_39 Start: 36360, Stop: 36671, Start Num: 7

Candidate Starts for Apizium\_39:

(Start: 6 @36357 has 101 MA's), (Start: 7 @36360 has 248 MA's), (Start: 16 @36423 has 8 MA's), (19, 36438), (Start: 21 @36447 has 15 MA's), (22, 36450), (30, 36486), (48, 36573), (65, 36663),

Gene: Arbiter\_40 Start: 37812, Stop: 38177, Start Num: 4

Candidate Starts for Arbiter\_40:

(Start: 4 @37812 has 27 MA's), (Start: 6 @37854 has 101 MA's), (Start: 7 @37857 has 248 MA's), (11, 37893), (Start: 16 @37920 has 8 MA's), (19, 37935), (24, 37956), (32, 37995), (56, 38118), (57, 38130), (62, 38160),

Gene: Ares\_41 Start: 37796, Stop: 38161, Start Num: 4

Candidate Starts for Ares\_41:

(Start: 4 @37796 has 27 MA's), (Start: 6 @37838 has 101 MA's), (Start: 7 @37841 has 248 MA's), (11, 37877), (Start: 16 @37904 has 8 MA's), (19, 37919), (24, 37940), (32, 37979), (56, 38102), (57, 38114), (62, 38144),

Gene: Argie\_36 Start: 36020, Stop: 36304, Start Num: 16

Candidate Starts for Argie\_36:

(Start: 16 @36020 has 8 MA's), (26, 36068), (36, 36119), (39, 36134), (42, 36170), (53, 36203), (57, 36245), (63, 36278),

Gene: Ashraf\_39 Start: 36164, Stop: 36475, Start Num: 7

Candidate Starts for Ashraf\_39:

(Start: 6 @36161 has 101 MA's), (Start: 7 @36164 has 248 MA's), (Start: 16 @36227 has 8 MA's), (19, 36242), (Start: 21 @36251 has 15 MA's), (30, 36290), (48, 36377),

Gene: Athena\_41 Start: 38010, Stop: 38333, Start Num: 7

Candidate Starts for Athena\_41:

(2, 37722), (Start: 7 @38010 has 248 MA's), (Start: 21 @38097 has 15 MA's), (49, 38220), (54, 38241), (60, 38301), (63, 38310),

Gene: Audrey\_40 Start: 37259, Stop: 37582, Start Num: 7

Candidate Starts for Audrey\_40:

(2, 36971), (Start: 7 @37259 has 248 MA's), (Start: 21 @37346 has 15 MA's), (49, 37469), (54, 37490), (60, 37550), (63, 37559),

Gene: Austelle\_38 Start: 37562, Stop: 37873, Start Num: 7

Candidate Starts for Austelle\_38:

(Start: 6 @37559 has 101 MA's), (Start: 7 @37562 has 248 MA's), (Start: 16 @37625 has 8 MA's), (19, 37640), (20, 37646), (Start: 21 @37649 has 15 MA's), (24, 37661), (30, 37688), (38, 37727), (47, 37772), (48, 37775), (57, 37829), (60, 37853),

Gene: Axumite\_33 Start: 29709, Stop: 30020, Start Num: 5

Candidate Starts for Axumite\_33:

(Start: 5 @29709 has 18 MA's), (11, 29763), (27, 29841), (28, 29844), (57, 29979),

Gene: Badfish\_40 Start: 36627, Stop: 36938, Start Num: 7

Candidate Starts for Badfish\_40:

(Start: 6 @36624 has 101 MA's), (Start: 7 @36627 has 248 MA's), (Start: 16 @36690 has 8 MA's), (19, 36705), (Start: 21 @36714 has 15 MA's), (22, 36717), (30, 36753), (48, 36840), (65, 36930),

Gene: Bae\_38 Start: 37127, Stop: 37447, Start Num: 7

Candidate Starts for Bae\_38:

(Start: 6 @37124 has 101 MA's), (Start: 7 @37127 has 248 MA's), (Start: 16 @37190 has 8 MA's), (18, 37196), (19, 37205), (Start: 21 @37214 has 15 MA's), (23, 37223), (26, 37235), (60, 37418),

Gene: Baloo\_40 Start: 37262, Stop: 37585, Start Num: 7

Candidate Starts for Baloo\_40:

(2, 36974), (Start: 7 @37262 has 248 MA's), (Start: 21 @37349 has 15 MA's), (49, 37472), (54, 37493), (60, 37553), (63, 37562),

Gene: Bananafish\_41 Start: 37732, Stop: 38097, Start Num: 4

Candidate Starts for Bananafish\_41:

(Start: 4 @37732 has 27 MA's), (Start: 6 @37774 has 101 MA's), (Start: 7 @37777 has 248 MA's), (11, 37813), (Start: 16 @37840 has 8 MA's), (19, 37855), (24, 37876), (32, 37915), (56, 38038), (57, 38050), (62, 38080),

Gene: Banjo\_39 Start: 36302, Stop: 36613, Start Num: 7

Candidate Starts for Banjo\_39:

(Start: 6 @36299 has 101 MA's), (Start: 7 @36302 has 248 MA's), (Start: 16 @36365 has 8 MA's), (19, 36380), (Start: 21 @36389 has 15 MA's), (22, 36392), (30, 36428), (48, 36515), (65, 36605),

Gene: Basato\_41 Start: 36881, Stop: 37192, Start Num: 7

Candidate Starts for Basato\_41:

(Start: 6 @36878 has 101 MA's), (Start: 7 @36881 has 248 MA's), (Start: 16 @36944 has 8 MA's), (19, 36959), (Start: 21 @36968 has 15 MA's), (22, 36971), (30, 37007), (48, 37094), (65, 37184),

Gene: BatteryCK\_39 Start: 36221, Stop: 36532, Start Num: 7

Candidate Starts for BatteryCK\_39:

(Start: 6 @36218 has 101 MA's), (Start: 7 @36221 has 248 MA's), (Start: 16 @36284 has 8 MA's), (19, 36299), (Start: 21 @36308 has 15 MA's), (22, 36311), (30, 36347), (48, 36434), (65, 36524),

Gene: Beaglebox\_39 Start: 36323, Stop: 36634, Start Num: 7

Candidate Starts for Beaglebox\_39:

(Start: 6 @36320 has 101 MA's), (Start: 7 @36323 has 248 MA's), (Start: 16 @36386 has 8 MA's), (19, 36401), (Start: 21 @36410 has 15 MA's), (22, 36413), (30, 36449), (48, 36536), (65, 36626),

Gene: Ben11\_39 Start: 37168, Stop: 37404, Start Num: 21

Candidate Starts for Ben11\_39:

(2, 36793), (Start: 21 @37168 has 15 MA's), (49, 37291), (54, 37312), (60, 37372), (63, 37381),

Gene: Bernardo\_41 Start: 37807, Stop: 38130, Start Num: 7

Candidate Starts for Bernardo\_41:

(2, 37519), (Start: 7 @37807 has 248 MA's), (Start: 21 @37894 has 15 MA's), (49, 38017), (54, 38038), (60, 38098), (63, 38107),

Gene: BiggityBass\_33 Start: 31960, Stop: 32271, Start Num: 5

Candidate Starts for BiggityBass\_33:

(Start: 5 @31960 has 18 MA's), (Start: 16 @32041 has 8 MA's), (27, 32092), (28, 32095), (57, 32230),

Gene: BirdsNest\_42 Start: 35554, Stop: 35868, Start Num: 6

Candidate Starts for BirdsNest\_42:

(Start: 6 @35554 has 101 MA's), (Start: 7 @35557 has 248 MA's), (Start: 16 @35620 has 8 MA's), (19, 35635), (23, 35653), (65, 35860),

Gene: Bishoperium\_39 Start: 36311, Stop: 36622, Start Num: 7

Candidate Starts for Bishoperium\_39:

(Start: 6 @36308 has 101 MA's), (Start: 7 @36311 has 248 MA's), (Start: 16 @36374 has 8 MA's), (19, 36389), (Start: 21 @36398 has 15 MA's), (22, 36401), (30, 36437), (48, 36524), (65, 36614),

Gene: BlackStallion\_40 Start: 36613, Stop: 36924, Start Num: 7

Candidate Starts for BlackStallion\_40:

(Start: 6 @36610 has 101 MA's), (Start: 7 @36613 has 248 MA's), (Start: 16 @36676 has 8 MA's), (19, 36691), (Start: 21 @36700 has 15 MA's), (22, 36703), (30, 36739), (48, 36826), (65, 36916),

Gene: Blocker23\_41 Start: 37895, Stop: 38215, Start Num: 7

Candidate Starts for Blocker23\_41:

(Start: 4 @37850 has 27 MA's), (Start: 6 @37892 has 101 MA's), (Start: 7 @37895 has 248 MA's), (11, 37931), (Start: 16 @37958 has 8 MA's), (19, 37973), (24, 37994), (32, 38033), (56, 38156), (57, 38168), (62, 38198),

Gene: BlueHusk\_40 Start: 36110, Stop: 36421, Start Num: 7

Candidate Starts for BlueHusk\_40:

(Start: 6 @36107 has 101 MA's), (Start: 7 @36110 has 248 MA's), (Start: 16 @36173 has 8 MA's), (19, 36188), (Start: 21 @36197 has 15 MA's), (22, 36200), (30, 36236), (48, 36323), (65, 36413),

Gene: Bluephacebaby\_39 Start: 36308, Stop: 36619, Start Num: 7

Candidate Starts for Bluephacebaby\_39:



(Start: 6 @36305 has 101 MA's), (Start: 7 @36308 has 248 MA's), (Start: 16 @36371 has 8 MA's), (19, 36386), (Start: 21 @36395 has 15 MA's), (22, 36398), (30, 36434), (48, 36521), (65, 36611),

Gene: BobRoss2024\_32 Start: 29738, Stop: 30019, Start Num: 9

Candidate Starts for BobRoss2024\_32:

(Start: 5 @29696 has 18 MA's), (Start: 9 @29738 has 1 MA's), (Start: 21 @29804 has 15 MA's), (23, 29813), (27, 29828), (41, 29900), (57, 29978),

Gene: BobbyK\_37 Start: 36931, Stop: 37242, Start Num: 7

Candidate Starts for BobbyK\_37:

(Start: 6 @36928 has 101 MA's), (Start: 7 @36931 has 248 MA's), (Start: 16 @36994 has 8 MA's), (19, 37009), (20, 37015), (Start: 21 @37018 has 15 MA's), (24, 37030), (30, 37057), (38, 37096), (47, 37141), (48, 37144), (54, 37165), (57, 37198), (60, 37222),

Gene: Boehler\_40 Start: 36614, Stop: 36925, Start Num: 7

Candidate Starts for Boehler\_40:

(Start: 6 @36611 has 101 MA's), (Start: 7 @36614 has 248 MA's), (Start: 16 @36677 has 8 MA's), (19, 36692), (Start: 21 @36701 has 15 MA's), (22, 36704), (30, 36740), (48, 36827), (65, 36917),

Gene: Boyle\_41 Start: 37896, Stop: 38216, Start Num: 7

Candidate Starts for Boyle\_41:

(Start: 4 @37851 has 27 MA's), (Start: 6 @37893 has 101 MA's), (Start: 7 @37896 has 248 MA's), (11, 37932), (Start: 16 @37959 has 8 MA's), (19, 37974), (24, 37995), (32, 38034), (56, 38157), (57, 38169), (62, 38199),

Gene: Briakila\_41 Start: 38116, Stop: 38352, Start Num: 21

Candidate Starts for Briakila\_41:

(2, 37741), (Start: 21 @38116 has 15 MA's), (49, 38239), (54, 38260), (60, 38320), (63, 38329),

Gene: Brilliant\_40 Start: 36319, Stop: 36630, Start Num: 7

Candidate Starts for Brilliant\_40:

(Start: 6 @36316 has 101 MA's), (Start: 7 @36319 has 248 MA's), (Start: 16 @36382 has 8 MA's), (19, 36397), (Start: 21 @36406 has 15 MA's), (30, 36445), (48, 36532), (65, 36622),

Gene: BrownCNA\_38 Start: 37192, Stop: 37503, Start Num: 7

Candidate Starts for BrownCNA\_38:

(Start: 6 @37189 has 101 MA's), (Start: 7 @37192 has 248 MA's), (Start: 16 @37255 has 8 MA's), (19, 37270), (20, 37276), (Start: 21 @37279 has 15 MA's), (24, 37291), (30, 37318), (38, 37357), (47, 37402), (48, 37405), (57, 37459), (60, 37483),

Gene: Brownie5\_41 Start: 37857, Stop: 38222, Start Num: 4

Candidate Starts for Brownie5\_41:

(Start: 4 @37857 has 27 MA's), (Start: 6 @37899 has 101 MA's), (Start: 7 @37902 has 248 MA's), (11, 37938), (Start: 16 @37965 has 8 MA's), (19, 37980), (24, 38001), (32, 38040), (56, 38163), (57, 38175), (62, 38205),

Gene: Buckeye\_40 Start: 36628, Stop: 36942, Start Num: 6

Candidate Starts for Buckeye\_40:

(Start: 6 @36628 has 101 MA's), (Start: 7 @36631 has 248 MA's), (Start: 16 @36694 has 8 MA's), (19, 36709), (Start: 21 @36718 has 15 MA's), (22, 36721), (30, 36757), (48, 36844), (65, 36934),

Gene: Burr\_39 Start: 36308, Stop: 36619, Start Num: 7

Candidate Starts for Burr\_39:

(Start: 6 @36305 has 101 MA's), (Start: 7 @36308 has 248 MA's), (Start: 16 @36371 has 8 MA's), (19, 36386), (Start: 21 @36395 has 15 MA's), (22, 36398), (30, 36434), (48, 36521), (65, 36611),

Gene: CRB2\_42 Start: 39392, Stop: 39706, Start Num: 7

Candidate Starts for CRB2\_42:

(Start: 6 @39389 has 101 MA's), (Start: 7 @39392 has 248 MA's), (13, 39443), (Start: 16 @39455 has 8 MA's), (18, 39464), (19, 39473), (22, 39485), (54, 39629), (60, 39686),

Gene: CaiB\_35 Start: 31645, Stop: 31959, Start Num: 5

Candidate Starts for CaiB\_35:

(Start: 5 @31645 has 18 MA's), (Start: 12 @31705 has 4 MA's), (27, 31777), (28, 31780), (29, 31789), (46, 31861), (57, 31918),

Gene: Calamitous\_41 Start: 37782, Stop: 38102, Start Num: 7

Candidate Starts for Calamitous\_41:

(Start: 4 @37737 has 27 MA's), (Start: 6 @37779 has 101 MA's), (Start: 7 @37782 has 248 MA's), (11, 37818), (Start: 16 @37845 has 8 MA's), (19, 37860), (24, 37881), (32, 37920), (56, 38043), (57, 38055), (62, 38085),

Gene: CamL\_40 Start: 36606, Stop: 36920, Start Num: 6

Candidate Starts for CamL\_40:

(Start: 6 @36606 has 101 MA's), (Start: 7 @36609 has 248 MA's), (Start: 16 @36672 has 8 MA's), (19, 36687), (Start: 21 @36696 has 15 MA's), (22, 36699), (30, 36735), (48, 36822), (65, 36912),

Gene: CampRoach\_40 Start: 36599, Stop: 36910, Start Num: 7

Candidate Starts for CampRoach\_40:

(Start: 6 @36596 has 101 MA's), (Start: 7 @36599 has 248 MA's), (Start: 16 @36662 has 8 MA's), (19, 36677), (Start: 21 @36686 has 15 MA's), (22, 36689), (30, 36725), (48, 36812), (65, 36902),

Gene: Cannibal\_40 Start: 36589, Stop: 36903, Start Num: 6

Candidate Starts for Cannibal\_40:

(Start: 6 @36589 has 101 MA's), (Start: 7 @36592 has 248 MA's), (Start: 16 @36655 has 8 MA's), (19, 36670), (Start: 21 @36679 has 15 MA's), (22, 36682), (30, 36718), (48, 36805), (65, 36895),

Gene: Carthage\_38 Start: 35521, Stop: 35832, Start Num: 7

Candidate Starts for Carthage\_38:

(Start: 6 @35518 has 101 MA's), (Start: 7 @35521 has 248 MA's), (Start: 16 @35584 has 8 MA's), (19, 35599), (Start: 21 @35608 has 15 MA's), (22, 35611), (30, 35647), (48, 35734), (65, 35824),

Gene: Casbah\_39 Start: 37198, Stop: 37434, Start Num: 21

Candidate Starts for Casbah\_39:

(2, 36823), (Start: 21 @37198 has 15 MA's), (49, 37321), (54, 37342), (60, 37402), (63, 37411),

Gene: Caspiboi\_41 Start: 36318, Stop: 36629, Start Num: 7

Candidate Starts for Caspiboi\_41:

(Start: 6 @36315 has 101 MA's), (Start: 7 @36318 has 248 MA's), (Start: 16 @36381 has 8 MA's), (19, 36396), (Start: 21 @36405 has 15 MA's), (30, 36444), (48, 36531), (65, 36621),

Gene: Cepens\_35 Start: 35735, Stop: 36019, Start Num: 16

Candidate Starts for Cepens\_35:

(Start: 16 @35735 has 8 MA's), (26, 35783), (36, 35834), (39, 35849), (40, 35855), (42, 35885), (53, 35918), (57, 35960), (63, 35993),

Gene: ChaChing\_40 Start: 37361, Stop: 37597, Start Num: 21

Candidate Starts for ChaChing\_40:

(2, 36986), (Start: 21 @37361 has 15 MA's), (49, 37484), (54, 37505), (60, 37565), (63, 37574),

Gene: Chaelin\_40 Start: 36306, Stop: 36617, Start Num: 7

Candidate Starts for Chaelin\_40:

(Start: 6 @36303 has 101 MA's), (Start: 7 @36306 has 248 MA's), (Start: 16 @36369 has 8 MA's), (19, 36384), (Start: 21 @36393 has 15 MA's), (22, 36396), (30, 36432), (48, 36519), (65, 36609),

Gene: Chah\_41 Start: 36626, Stop: 36937, Start Num: 7

Candidate Starts for Chah\_41:

(Start: 6 @36623 has 101 MA's), (Start: 7 @36626 has 248 MA's), (Start: 16 @36689 has 8 MA's), (19, 36704), (Start: 21 @36713 has 15 MA's), (22, 36716), (30, 36752), (48, 36839), (65, 36929),

Gene: Chalmers\_40 Start: 38153, Stop: 38389, Start Num: 21

Candidate Starts for Chalmers\_40:

(2, 37778), (Start: 21 @38153 has 15 MA's), (49, 38276), (54, 38297), (60, 38357), (63, 38366),

Gene: Chandler\_40 Start: 38129, Stop: 38365, Start Num: 21

Candidate Starts for Chandler\_40:

(2, 37754), (Start: 21 @38129 has 15 MA's), (49, 38252), (54, 38273), (60, 38333), (63, 38342),

Gene: Charles1\_40 Start: 36594, Stop: 36905, Start Num: 7

Candidate Starts for Charles1\_40:

(Start: 6 @36591 has 101 MA's), (Start: 7 @36594 has 248 MA's), (Start: 16 @36657 has 8 MA's), (19, 36672), (Start: 21 @36681 has 15 MA's), (22, 36684), (30, 36720), (48, 36807), (65, 36897),

Gene: CharlieGBrown\_39 Start: 36181, Stop: 36495, Start Num: 6

Candidate Starts for CharlieGBrown\_39:

(Start: 6 @36181 has 101 MA's), (Start: 7 @36184 has 248 MA's), (Start: 16 @36247 has 8 MA's), (19, 36262), (Start: 21 @36271 has 15 MA's), (30, 36310), (48, 36397),

Gene: CharlottesWeb\_33 Start: 29653, Stop: 29964, Start Num: 5

Candidate Starts for CharlottesWeb\_33:

(Start: 5 @29653 has 18 MA's), (11, 29707), (27, 29785), (50, 29872), (57, 29923),

Gene: CheetO\_40 Start: 36605, Stop: 36919, Start Num: 6

Candidate Starts for CheetO\_40:

(Start: 6 @36605 has 101 MA's), (Start: 7 @36608 has 248 MA's), (Start: 16 @36671 has 8 MA's), (19, 36686), (Start: 21 @36695 has 15 MA's), (22, 36698), (30, 36734), (48, 36821), (65, 36911),

Gene: Chentzyk\_40 Start: 37623, Stop: 37946, Start Num: 7

Candidate Starts for Chentzyk\_40:

(2, 37335), (Start: 7 @37623 has 248 MA's), (Start: 21 @37710 has 15 MA's), (49, 37833), (54, 37854), (60, 37914), (63, 37923),

Gene: Cher\_39 Start: 36328, Stop: 36642, Start Num: 6

Candidate Starts for Cher\_39:

(Start: 6 @36328 has 101 MA's), (Start: 7 @36331 has 248 MA's), (Start: 16 @36394 has 8 MA's), (19, 36409), (Start: 21 @36418 has 15 MA's), (22, 36421), (30, 36457), (48, 36544), (65, 36634),

Gene: Childish\_39 Start: 36334, Stop: 36645, Start Num: 7

Candidate Starts for Childish\_39:

(Start: 6 @36331 has 101 MA's), (Start: 7 @36334 has 248 MA's), (Start: 16 @36397 has 8 MA's), (19, 36412), (Start: 21 @36421 has 15 MA's), (22, 36424), (30, 36460), (48, 36547), (65, 36637),

Gene: Chipette\_41 Start: 36821, Stop: 37135, Start Num: 6

Candidate Starts for Chipette\_41:

(Start: 6 @36821 has 101 MA's), (Start: 7 @36824 has 248 MA's), (Start: 16 @36887 has 8 MA's), (19, 36902), (Start: 21 @36911 has 15 MA's), (22, 36914), (30, 36950), (48, 37037), (65, 37127),

Gene: Chorkpop\_40 Start: 36330, Stop: 36641, Start Num: 7

Candidate Starts for Chorkpop\_40:

(Start: 6 @36327 has 101 MA's), (Start: 7 @36330 has 248 MA's), (Start: 16 @36393 has 8 MA's), (19, 36408), (Start: 21 @36417 has 15 MA's), (22, 36420), (30, 36456), (48, 36543), (65, 36633),

Gene: ChrisnMich\_36 Start: 35892, Stop: 36203, Start Num: 7

Candidate Starts for ChrisnMich\_36:

(Start: 6 @35889 has 101 MA's), (Start: 7 @35892 has 248 MA's), (Start: 16 @35955 has 8 MA's), (19, 35970), (20, 35976), (Start: 21 @35979 has 15 MA's), (24, 35991), (30, 36018), (38, 36057), (47, 36102), (48, 36105), (54, 36126), (57, 36159),

Gene: Chunky\_40 Start: 36614, Stop: 36928, Start Num: 6

Candidate Starts for Chunky\_40:

(Start: 6 @36614 has 101 MA's), (Start: 7 @36617 has 248 MA's), (Start: 16 @36680 has 8 MA's), (19, 36695), (Start: 21 @36704 has 15 MA's), (22, 36707), (30, 36743), (48, 36830), (65, 36920),

Gene: Chute\_39 Start: 36655, Stop: 36966, Start Num: 7

Candidate Starts for Chute\_39:

(Start: 6 @36652 has 101 MA's), (Start: 7 @36655 has 248 MA's), (Start: 16 @36718 has 8 MA's), (19, 36733), (Start: 21 @36742 has 15 MA's), (22, 36745), (30, 36781), (48, 36868), (65, 36958),

Gene: Clawz\_55 Start: 30520, Stop: 30741, Start Num: 12

Candidate Starts for Clawz\_55:

(Start: 12 @30520 has 4 MA's), (23, 30577), (26, 30589), (33, 30604), (55, 30682), (58, 30712), (60, 30733),

Gene: CloverMinnie\_35 Start: 31585, Stop: 31899, Start Num: 5

Candidate Starts for CloverMinnie\_35:

(Start: 5 @31585 has 18 MA's), (Start: 12 @31645 has 4 MA's), (27, 31717), (28, 31720), (29, 31729), (46, 31801), (57, 31858),

Gene: Cobra\_40 Start: 36612, Stop: 36926, Start Num: 6

Candidate Starts for Cobra\_40:

(Start: 6 @36612 has 101 MA's), (Start: 7 @36615 has 248 MA's), (Start: 16 @36678 has 8 MA's), (19, 36693), (Start: 21 @36702 has 15 MA's), (30, 36741), (48, 36828),

Gene: Coffee\_41 Start: 37840, Stop: 38205, Start Num: 4

Candidate Starts for Coffee\_41:

(Start: 4 @37840 has 27 MA's), (Start: 6 @37882 has 101 MA's), (Start: 7 @37885 has 248 MA's), (11, 37921), (Start: 16 @37948 has 8 MA's), (19, 37963), (24, 37984), (32, 38023), (56, 38146), (57, 38158), (62, 38188),

Gene: Colbert\_40 Start: 36670, Stop: 36981, Start Num: 7

Candidate Starts for Colbert\_40:

(Start: 6 @36667 has 101 MA's), (Start: 7 @36670 has 248 MA's), (Start: 16 @36733 has 8 MA's), (19, 36748), (Start: 21 @36757 has 15 MA's), (22, 36760), (30, 36796), (48, 36883), (65, 36973),

Gene: ColdSoup\_56 Start: 30719, Stop: 30940, Start Num: 12

Candidate Starts for ColdSoup\_56:

(Start: 12 @30719 has 4 MA's), (25, 30785), (26, 30788), (33, 30803), (55, 30881), (58, 30911), (60, 30932),

Gene: Coldpizza\_36 Start: 34143, Stop: 34412, Start Num: 9

Candidate Starts for Coldpizza\_36:

(Start: 9 @34143 has 1 MA's), (19, 34200), (Start: 21 @34209 has 15 MA's), (27, 34233), (48, 34311), (60, 34395),

Gene: Coletti\_39 Start: 36655, Stop: 36966, Start Num: 7

Candidate Starts for Coletti\_39:

(Start: 6 @36652 has 101 MA's), (Start: 7 @36655 has 248 MA's), (Start: 16 @36718 has 8 MA's), (19, 36733), (Start: 21 @36742 has 15 MA's), (22, 36745), (30, 36781), (48, 36868), (65, 36958),

Gene: Compostia\_41 Start: 37690, Stop: 38013, Start Num: 7

Candidate Starts for Compostia\_41:

(2, 37402), (Start: 7 @37690 has 248 MA's), (Start: 21 @37777 has 15 MA's), (49, 37900), (54, 37921), (60, 37981), (63, 37990),

Gene: Cooper\_37 Start: 36111, Stop: 36422, Start Num: 7

Candidate Starts for Cooper\_37:

(1, 35772), (Start: 6 @36108 has 101 MA's), (Start: 7 @36111 has 248 MA's), (15, 36171), (Start: 16 @36174 has 8 MA's), (19, 36189), (20, 36195), (Start: 21 @36198 has 15 MA's), (24, 36210), (30, 36237), (38, 36276), (47, 36321), (48, 36324), (57, 36378), (60, 36402),

Gene: Cornbread\_40 Start: 36331, Stop: 36642, Start Num: 7

Candidate Starts for Cornbread\_40:

(Start: 6 @36328 has 101 MA's), (Start: 7 @36331 has 248 MA's), (Start: 16 @36394 has 8 MA's), (19, 36409), (Start: 21 @36418 has 15 MA's), (30, 36457), (48, 36544),

Gene: Cornobble\_39 Start: 36166, Stop: 36480, Start Num: 6

Candidate Starts for Cornobble\_39:

(Start: 6 @36166 has 101 MA's), (Start: 7 @36169 has 248 MA's), (Start: 16 @36232 has 8 MA's), (19, 36247), (Start: 21 @36256 has 15 MA's), (22, 36259), (30, 36295), (48, 36382), (65, 36472),

Gene: Corofin\_40 Start: 37372, Stop: 37608, Start Num: 21

Candidate Starts for Corofin\_40:

(2, 36997), (Start: 21 @37372 has 15 MA's), (49, 37495), (54, 37516), (60, 37576), (63, 37585),

Gene: Cosmolli16\_39 Start: 36316, Stop: 36630, Start Num: 6

Candidate Starts for Cosmolli16\_39:

(Start: 6 @36316 has 101 MA's), (Start: 7 @36319 has 248 MA's), (Start: 16 @36382 has 8 MA's), (19, 36397), (Start: 21 @36406 has 15 MA's), (22, 36409), (30, 36445), (48, 36532), (65, 36622),

Gene: Craff\_40 Start: 36612, Stop: 36923, Start Num: 7

Candidate Starts for Craff\_40:

(Start: 6 @36609 has 101 MA's), (Start: 7 @36612 has 248 MA's), (Start: 16 @36675 has 8 MA's), (19, 36690), (Start: 21 @36699 has 15 MA's), (22, 36702), (30, 36738), (48, 36825), (65, 36915),

Gene: Crownjwl\_40 Start: 36382, Stop: 36696, Start Num: 6

Candidate Starts for Crownjwl\_40:

(Start: 6 @36382 has 101 MA's), (Start: 7 @36385 has 248 MA's), (Start: 16 @36448 has 8 MA's), (19, 36463), (Start: 21 @36472 has 15 MA's), (22, 36475), (30, 36511), (48, 36598), (65, 36688),

Gene: D12\_34 Start: 36305, Stop: 36589, Start Num: 16

Candidate Starts for D12\_34:

(Start: 16 @36305 has 8 MA's), (26, 36353), (36, 36404), (39, 36419), (40, 36425), (42, 36455), (53, 36488), (57, 36530), (63, 36563),

Gene: DaddyDaniels\_40 Start: 36303, Stop: 36614, Start Num: 7

Candidate Starts for DaddyDaniels\_40:

(Start: 6 @36300 has 101 MA's), (Start: 7 @36303 has 248 MA's), (Start: 16 @36366 has 8 MA's), (19, 36381), (Start: 21 @36390 has 15 MA's), (30, 36429), (48, 36516),

Gene: Daffy\_40 Start: 36334, Stop: 36645, Start Num: 7

Candidate Starts for Daffy\_40:

(Start: 6 @36331 has 101 MA's), (Start: 7 @36334 has 248 MA's), (Start: 16 @36397 has 8 MA's), (19, 36412), (Start: 21 @36421 has 15 MA's), (22, 36424), (30, 36460), (48, 36547), (65, 36637),

Gene: Daisy\_40 Start: 37373, Stop: 37609, Start Num: 21

Candidate Starts for Daisy\_40:

(2, 36998), (Start: 21 @37373 has 15 MA's), (49, 37496), (54, 37517), (60, 37577), (63, 37586),

Gene: Daka\_40 Start: 36605, Stop: 36919, Start Num: 6

Candidate Starts for Daka\_40:

(Start: 6 @36605 has 101 MA's), (Start: 7 @36608 has 248 MA's), (Start: 16 @36671 has 8 MA's), (19, 36686), (Start: 21 @36695 has 15 MA's), (22, 36698), (30, 36734), (48, 36821), (65, 36911),

Gene: Dati\_40 Start: 36328, Stop: 36639, Start Num: 7

Candidate Starts for Dati\_40:

(Start: 6 @36325 has 101 MA's), (Start: 7 @36328 has 248 MA's), (Start: 16 @36391 has 8 MA's), (19, 36406), (Start: 21 @36415 has 15 MA's), (30, 36454), (48, 36541),

Gene: Deenasa\_40 Start: 38021, Stop: 38344, Start Num: 7

Candidate Starts for Deenasa\_40:

(2, 37733), (Start: 7 @38021 has 248 MA's), (Start: 21 @38108 has 15 MA's), (49, 38231), (54, 38252), (60, 38312), (63, 38321),

Gene: DelRivs\_39 Start: 36329, Stop: 36640, Start Num: 7

Candidate Starts for DelRivs\_39:

(Start: 6 @36326 has 101 MA's), (Start: 7 @36329 has 248 MA's), (Start: 16 @36392 has 8 MA's), (19, 36407), (Start: 21 @36416 has 15 MA's), (30, 36455), (48, 36542), (65, 36632),

Gene: Derpp\_39 Start: 36170, Stop: 36484, Start Num: 6

Candidate Starts for Derpp\_39:

(Start: 6 @36170 has 101 MA's), (Start: 7 @36173 has 248 MA's), (Start: 16 @36236 has 8 MA's), (19, 36251), (Start: 21 @36260 has 15 MA's), (30, 36299), (48, 36386),

Gene: Devonte\_40 Start: 37250, Stop: 37573, Start Num: 7

Candidate Starts for Devonte\_40:

(2, 36962), (Start: 7 @37250 has 248 MA's), (Start: 21 @37337 has 15 MA's), (49, 37460), (54, 37481), (60, 37541), (63, 37550),

Gene: Dice\_39 Start: 36308, Stop: 36619, Start Num: 7

Candidate Starts for Dice\_39:

(Start: 6 @36305 has 101 MA's), (Start: 7 @36308 has 248 MA's), (Start: 16 @36371 has 8 MA's), (19, 36386), (Start: 21 @36395 has 15 MA's), (22, 36398), (30, 36434), (48, 36521), (65, 36611),

Gene: DigitDog\_39 Start: 36912, Stop: 37232, Start Num: 7

Candidate Starts for DigitDog\_39:

(Start: 6 @36909 has 101 MA's), (Start: 7 @36912 has 248 MA's), (Start: 16 @36975 has 8 MA's), (18, 36981), (19, 36990), (Start: 21 @36999 has 15 MA's), (23, 37008), (25, 37017), (26, 37020), (60, 37203),

Gene: Dingo\_40 Start: 36591, Stop: 36902, Start Num: 7

Candidate Starts for Dingo\_40:

(Start: 6 @36588 has 101 MA's), (Start: 7 @36591 has 248 MA's), (Start: 16 @36654 has 8 MA's), (19, 36669), (Start: 21 @36678 has 15 MA's), (22, 36681), (30, 36717), (48, 36804), (65, 36894),

Gene: Dione\_39 Start: 36310, Stop: 36624, Start Num: 6

Candidate Starts for Dione\_39:

(Start: 6 @36310 has 101 MA's), (Start: 7 @36313 has 248 MA's), (Start: 16 @36376 has 8 MA's), (19, 36391), (Start: 21 @36400 has 15 MA's), (22, 36403), (30, 36439), (48, 36526), (65, 36616),

Gene: DirtJuice\_40 Start: 36597, Stop: 36908, Start Num: 7

Candidate Starts for DirtJuice\_40:

(Start: 6 @36594 has 101 MA's), (Start: 7 @36597 has 248 MA's), (Start: 16 @36660 has 8 MA's), (19, 36675), (Start: 21 @36684 has 15 MA's), (22, 36687), (30, 36723), (48, 36810), (65, 36900),

Gene: Doddsville\_40 Start: 36327, Stop: 36638, Start Num: 7

Candidate Starts for Doddsville\_40:

(Start: 6 @36324 has 101 MA's), (Start: 7 @36327 has 248 MA's), (Start: 16 @36390 has 8 MA's), (19, 36405), (Start: 21 @36414 has 15 MA's), (30, 36453), (48, 36540),

Gene: DoesntMatter\_40 Start: 36597, Stop: 36911, Start Num: 6

Candidate Starts for DoesntMatter\_40:

(Start: 6 @36597 has 101 MA's), (Start: 7 @36600 has 248 MA's), (Start: 16 @36663 has 8 MA's), (19, 36678), (Start: 21 @36687 has 15 MA's), (22, 36690), (30, 36726), (48, 36813), (65, 36903),

Gene: DonSanchon\_39 Start: 36304, Stop: 36618, Start Num: 6

Candidate Starts for DonSanchon\_39:

(Start: 6 @36304 has 101 MA's), (Start: 7 @36307 has 248 MA's), (Start: 16 @36370 has 8 MA's), (19, 36385), (Start: 21 @36394 has 15 MA's), (22, 36397), (30, 36433), (48, 36520), (65, 36610),

Gene: DonTron\_55 Start: 30760, Stop: 30981, Start Num: 12

Candidate Starts for DonTron\_55:

(Start: 12 @30760 has 4 MA's), (Start: 21 @30808 has 15 MA's), (25, 30826), (26, 30829), (33, 30844), (55, 30922), (58, 30952), (60, 30973),

Gene: Donny\_39 Start: 37205, Stop: 37525, Start Num: 7

Candidate Starts for Donny\_39:

(Start: 6 @37202 has 101 MA's), (Start: 7 @37205 has 248 MA's), (Start: 16 @37268 has 8 MA's), (18, 37274), (19, 37283), (Start: 21 @37292 has 15 MA's), (23, 37301), (26, 37313), (60, 37496),

Gene: DuchessDung\_38 Start: 35464, Stop: 35775, Start Num: 7

Candidate Starts for DuchessDung\_38:

(Start: 6 @35461 has 101 MA's), (Start: 7 @35464 has 248 MA's), (Start: 16 @35527 has 8 MA's), (19, 35542), (Start: 21 @35551 has 15 MA's), (30, 35590), (48, 35677),

Gene: Duggie\_39 Start: 36329, Stop: 36640, Start Num: 7

Candidate Starts for Duggie\_39:

(Start: 6 @36326 has 101 MA's), (Start: 7 @36329 has 248 MA's), (Start: 16 @36392 has 8 MA's), (19, 36407), (Start: 21 @36416 has 15 MA's), (30, 36455), (48, 36542),

Gene: Durga\_40 Start: 36627, Stop: 36938, Start Num: 7

Candidate Starts for Durga\_40:

(Start: 6 @36624 has 101 MA's), (Start: 7 @36627 has 248 MA's), (Start: 16 @36690 has 8 MA's), (19, 36705), (Start: 21 @36714 has 15 MA's), (30, 36753), (48, 36840),

Gene: Eaglehorse\_41 Start: 37764, Stop: 38129, Start Num: 4

Candidate Starts for Eaglehorse\_41:

(Start: 4 @37764 has 27 MA's), (Start: 6 @37806 has 101 MA's), (Start: 7 @37809 has 248 MA's), (11, 37845), (Start: 16 @37872 has 8 MA's), (19, 37887), (24, 37908), (32, 37947), (56, 38070), (57, 38082), (62, 38112),

Gene: EastView9101\_38 Start: 36855, Stop: 37175, Start Num: 7

Candidate Starts for EastView9101\_38:

(Start: 6 @36852 has 101 MA's), (Start: 7 @36855 has 248 MA's), (Start: 16 @36918 has 8 MA's), (18, 36924), (19, 36933), (Start: 21 @36942 has 15 MA's), (23, 36951), (26, 36963), (60, 37146),

Gene: ElvisPhasley\_40 Start: 36649, Stop: 36960, Start Num: 7

Candidate Starts for ElvisPhasley\_40:

(Start: 6 @36646 has 101 MA's), (Start: 7 @36649 has 248 MA's), (Start: 16 @36712 has 8 MA's), (19, 36727), (Start: 21 @36736 has 15 MA's), (22, 36739), (30, 36775), (48, 36862), (65, 36952),

Gene: Emiris\_40 Start: 36598, Stop: 36909, Start Num: 7

Candidate Starts for Emiris\_40:

(Start: 6 @36595 has 101 MA's), (Start: 7 @36598 has 248 MA's), (Start: 16 @36661 has 8 MA's), (19, 36676), (Start: 21 @36685 has 15 MA's), (30, 36724), (48, 36811),

Gene: EmpTee\_40 Start: 36607, Stop: 36918, Start Num: 7

Candidate Starts for EmpTee\_40:

(Start: 6 @36604 has 101 MA's), (Start: 7 @36607 has 248 MA's), (Start: 16 @36670 has 8 MA's), (19, 36685), (Start: 21 @36694 has 15 MA's), (22, 36697), (30, 36733), (48, 36820), (65, 36910),

Gene: Epah\_36 Start: 35900, Stop: 36211, Start Num: 7

Candidate Starts for Epah\_36:

(Start: 6 @35897 has 101 MA's), (Start: 7 @35900 has 248 MA's), (Start: 16 @35963 has 8 MA's), (19, 35978), (20, 35984), (Start: 21 @35987 has 15 MA's), (24, 35999), (30, 36026), (38, 36065), (47, 36110), (48, 36113), (54, 36134), (57, 36167),

Gene: Eremos\_40 Start: 36603, Stop: 36917, Start Num: 6

Candidate Starts for Eremos\_40:

(Start: 6 @36603 has 101 MA's), (Start: 7 @36606 has 248 MA's), (Start: 16 @36669 has 8 MA's), (19, 36684), (Start: 21 @36693 has 15 MA's), (22, 36696), (30, 36732), (48, 36819), (65, 36909),

Gene: Etaye\_40 Start: 36594, Stop: 36908, Start Num: 6

Candidate Starts for Etaye\_40:



(Start: 6 @36594 has 101 MA's), (Start: 7 @36597 has 248 MA's), (Start: 16 @36660 has 8 MA's), (19, 36675), (Start: 21 @36684 has 15 MA's), (30, 36723), (48, 36810),

Gene: Eugenia\_40 Start: 36616, Stop: 36927, Start Num: 7

Candidate Starts for Eugenia\_40:

(Start: 6 @36613 has 101 MA's), (Start: 7 @36616 has 248 MA's), (Start: 16 @36679 has 8 MA's), (19, 36694), (Start: 21 @36703 has 15 MA's), (22, 36706), (30, 36742), (48, 36829), (65, 36919),

Gene: Fanaw\_36 Start: 36597, Stop: 36908, Start Num: 7

Candidate Starts for Fanaw\_36:

(Start: 6 @36594 has 101 MA's), (Start: 7 @36597 has 248 MA's), (Start: 16 @36660 has 8 MA's), (19, 36675), (20, 36681), (Start: 21 @36684 has 15 MA's), (24, 36696), (30, 36723), (38, 36762), (47, 36807), (48, 36810), (57, 36864), (60, 36888),

Gene: Fang\_40 Start: 36620, Stop: 36931, Start Num: 7

Candidate Starts for Fang\_40:

(Start: 6 @36617 has 101 MA's), (Start: 7 @36620 has 248 MA's), (Start: 16 @36683 has 8 MA's), (19, 36698), (Start: 21 @36707 has 15 MA's), (22, 36710), (30, 36746), (48, 36833), (65, 36923),

Gene: Faze9\_40 Start: 37860, Stop: 38225, Start Num: 4

Candidate Starts for Faze9\_40:

(Start: 4 @37860 has 27 MA's), (Start: 6 @37902 has 101 MA's), (Start: 7 @37905 has 248 MA's), (11, 37941), (Start: 16 @37968 has 8 MA's), (19, 37983), (24, 38004), (32, 38043), (56, 38166), (57, 38178), (62, 38208),

Gene: FluffyNinja\_40 Start: 36610, Stop: 36924, Start Num: 6

Candidate Starts for FluffyNinja\_40:

(Start: 6 @36610 has 101 MA's), (Start: 7 @36613 has 248 MA's), (Start: 16 @36676 has 8 MA's), (19, 36691), (Start: 21 @36700 has 15 MA's), (22, 36703), (30, 36739), (48, 36826), (65, 36916),

Gene: ForDig\_35 Start: 34911, Stop: 35225, Start Num: 7

Candidate Starts for ForDig\_35:

(Start: 6 @34908 has 101 MA's), (Start: 7 @34911 has 248 MA's), (Start: 16 @34974 has 8 MA's), (18, 34983), (19, 34992), (Start: 21 @35001 has 15 MA's), (24, 35013), (48, 35127), (54, 35148), (57, 35181),

Gene: Fortunato\_37 Start: 36922, Stop: 37236, Start Num: 6

Candidate Starts for Fortunato\_37:

(Start: 6 @36922 has 101 MA's), (Start: 7 @36925 has 248 MA's), (Start: 16 @36988 has 8 MA's), (19, 37003), (20, 37009), (Start: 21 @37012 has 15 MA's), (24, 37024), (30, 37051), (38, 37090), (47, 37135), (48, 37138), (57, 37192), (60, 37216),

Gene: Fozzie\_39 Start: 36629, Stop: 36940, Start Num: 7

Candidate Starts for Fozzie\_39:

(Start: 6 @36626 has 101 MA's), (Start: 7 @36629 has 248 MA's), (Start: 16 @36692 has 8 MA's), (19, 36707), (Start: 21 @36716 has 15 MA's), (22, 36719), (30, 36755), (48, 36842), (65, 36932),

Gene: Frankicide\_40 Start: 36625, Stop: 36936, Start Num: 7

Candidate Starts for Frankicide\_40:

(Start: 6 @36622 has 101 MA's), (Start: 7 @36625 has 248 MA's), (Start: 16 @36688 has 8 MA's), (19, 36703), (Start: 21 @36712 has 15 MA's), (22, 36715), (30, 36751), (48, 36838), (65, 36928),

Gene: Frederick\_37 Start: 36931, Stop: 37242, Start Num: 7

Candidate Starts for Frederick\_37:

(Start: 6 @36928 has 101 MA's), (Start: 7 @36931 has 248 MA's), (Start: 16 @36994 has 8 MA's), (19, 37009), (20, 37015), (Start: 21 @37018 has 15 MA's), (24, 37030), (30, 37057), (38, 37096), (47, 37141), (48, 37144), (54, 37165), (57, 37198), (60, 37222),

Gene: FrenchFry\_41 Start: 37854, Stop: 38219, Start Num: 4

Candidate Starts for FrenchFry\_41:

(Start: 4 @37854 has 27 MA's), (Start: 6 @37896 has 101 MA's), (Start: 7 @37899 has 248 MA's), (11, 37935), (Start: 16 @37962 has 8 MA's), (19, 37977), (24, 37998), (32, 38037), (56, 38160), (57, 38172), (62, 38202),

Gene: Fresco\_33 Start: 29709, Stop: 30020, Start Num: 5

Candidate Starts for Fresco\_33:

(Start: 5 @29709 has 18 MA's), (11, 29763), (27, 29841), (28, 29844), (57, 29979),

Gene: Freya\_39 Start: 36304, Stop: 36615, Start Num: 7

Candidate Starts for Freya\_39:

(Start: 6 @36301 has 101 MA's), (Start: 7 @36304 has 248 MA's), (Start: 16 @36367 has 8 MA's), (19, 36382), (Start: 21 @36391 has 15 MA's), (22, 36394), (30, 36430), (48, 36517), (65, 36607),

Gene: FriarPreacher\_40 Start: 36628, Stop: 36942, Start Num: 6

Candidate Starts for FriarPreacher\_40:

(Start: 6 @36628 has 101 MA's), (Start: 7 @36631 has 248 MA's), (Start: 16 @36694 has 8 MA's), (19, 36709), (Start: 21 @36718 has 15 MA's), (22, 36721), (30, 36757), (48, 36844), (65, 36934),

Gene: Fringe\_40 Start: 36596, Stop: 36907, Start Num: 7

Candidate Starts for Fringe\_40:

(Start: 6 @36593 has 101 MA's), (Start: 7 @36596 has 248 MA's), (Start: 16 @36659 has 8 MA's), (19, 36674), (Start: 21 @36683 has 15 MA's), (22, 36686), (30, 36722), (48, 36809), (65, 36899),

Gene: FugateOSU\_39 Start: 36306, Stop: 36620, Start Num: 6

Candidate Starts for FugateOSU\_39:

(Start: 6 @36306 has 101 MA's), (Start: 7 @36309 has 248 MA's), (Start: 16 @36372 has 8 MA's), (19, 36387), (Start: 21 @36396 has 15 MA's), (22, 36399), (30, 36435), (48, 36522), (65, 36612),

Gene: Funsized\_42 Start: 39513, Stop: 39821, Start Num: 7

Candidate Starts for Funsized\_42:

(Start: 7 @39513 has 248 MA's), (11, 39549), (14, 39570), (Start: 16 @39576 has 8 MA's), (18, 39582), (19, 39591), (20, 39597), (Start: 21 @39600 has 15 MA's), (26, 39621), (44, 39717), (52, 39741),

Gene: Gadget\_41 Start: 37273, Stop: 37596, Start Num: 7

Candidate Starts for Gadget\_41:

(2, 36985), (Start: 7 @37273 has 248 MA's), (Start: 21 @37360 has 15 MA's), (49, 37483), (54, 37504), (60, 37564), (63, 37573),

Gene: Gareth\_39 Start: 36309, Stop: 36623, Start Num: 6

Candidate Starts for Gareth\_39:

(Start: 6 @36309 has 101 MA's), (Start: 7 @36312 has 248 MA's), (Start: 16 @36375 has 8 MA's), (19, 36390), (Start: 21 @36399 has 15 MA's), (22, 36402), (30, 36438), (48, 36525), (65, 36615),

Gene: GeneCoco\_40 Start: 36618, Stop: 36932, Start Num: 6

Candidate Starts for GeneCoco\_40:

(Start: 6 @36618 has 101 MA's), (Start: 7 @36621 has 248 MA's), (Start: 16 @36684 has 8 MA's), (19, 36699), (Start: 21 @36708 has 15 MA's), (30, 36747), (48, 36834),

Gene: Gervas\_40 Start: 37240, Stop: 37563, Start Num: 7

Candidate Starts for Gervas\_40:

(2, 36952), (Start: 7 @37240 has 248 MA's), (Start: 21 @37327 has 15 MA's), (49, 37450), (54, 37471), (60, 37531), (63, 37540),

Gene: GinPorsche\_36 Start: 35900, Stop: 36211, Start Num: 7

Candidate Starts for GinPorsche\_36:

(Start: 6 @35897 has 101 MA's), (Start: 7 @35900 has 248 MA's), (Start: 16 @35963 has 8 MA's), (19, 35978), (20, 35984), (Start: 21 @35987 has 15 MA's), (24, 35999), (30, 36026), (38, 36065), (47, 36110), (48, 36113), (54, 36134), (57, 36167),

Gene: Giraffe\_40 Start: 36315, Stop: 36626, Start Num: 7

Candidate Starts for Giraffe\_40:

(Start: 6 @36312 has 101 MA's), (Start: 7 @36315 has 248 MA's), (Start: 16 @36378 has 8 MA's), (19, 36393), (Start: 21 @36402 has 15 MA's), (22, 36405), (30, 36441), (48, 36528), (65, 36618),

Gene: Glass\_41 Start: 37854, Stop: 38219, Start Num: 4

Candidate Starts for Glass\_41:

(Start: 4 @37854 has 27 MA's), (Start: 6 @37896 has 101 MA's), (Start: 7 @37899 has 248 MA's), (11, 37935), (Start: 16 @37962 has 8 MA's), (19, 37977), (24, 37998), (32, 38037), (56, 38160), (57, 38172), (62, 38202),

Gene: GlenHope\_41 Start: 37253, Stop: 37576, Start Num: 7

Candidate Starts for GlenHope\_41:

(2, 36965), (Start: 7 @37253 has 248 MA's), (Start: 21 @37340 has 15 MA's), (49, 37463), (54, 37484), (60, 37544), (63, 37553),

Gene: Glubnar\_40 Start: 37252, Stop: 37575, Start Num: 7

Candidate Starts for Glubnar\_40:

(2, 36964), (Start: 7 @37252 has 248 MA's), (Start: 21 @37339 has 15 MA's), (49, 37462), (54, 37483), (60, 37543), (63, 37552),

Gene: GodPhather\_36 Start: 36499, Stop: 36783, Start Num: 16

Candidate Starts for GodPhather\_36:

(Start: 16 @36499 has 8 MA's), (24, 36538), (26, 36547), (36, 36598), (39, 36613), (42, 36649), (53, 36682), (57, 36724), (63, 36757),

Gene: Godines\_41 Start: 37796, Stop: 38161, Start Num: 4

Candidate Starts for Godines\_41:

(Start: 4 @37796 has 27 MA's), (Start: 6 @37838 has 101 MA's), (Start: 7 @37841 has 248 MA's), (11, 37877), (Start: 16 @37904 has 8 MA's), (19, 37919), (24, 37940), (32, 37979), (56, 38102), (57, 38114), (62, 38144),

Gene: Gophee\_40 Start: 36598, Stop: 36909, Start Num: 7

Candidate Starts for Gophee\_40:

(Start: 6 @36595 has 101 MA's), (Start: 7 @36598 has 248 MA's), (Start: 16 @36661 has 8 MA's), (19, 36676), (Start: 21 @36685 has 15 MA's), (22, 36688), (30, 36724), (48, 36811), (65, 36901),

Gene: Grand2040\_39 Start: 36327, Stop: 36641, Start Num: 6

Candidate Starts for Grand2040\_39:

(Start: 6 @36327 has 101 MA's), (Start: 7 @36330 has 248 MA's), (Start: 16 @36393 has 8 MA's), (19, 36408), (Start: 21 @36417 has 15 MA's), (22, 36420), (30, 36456), (48, 36543), (65, 36633),

Gene: Gwennie1\_40 Start: 36679, Stop: 36990, Start Num: 7

Candidate Starts for Gwennie1\_40:

(Start: 6 @36676 has 101 MA's), (Start: 7 @36679 has 248 MA's), (Start: 16 @36742 has 8 MA's), (19, 36757), (Start: 21 @36766 has 15 MA's), (30, 36805), (48, 36892),

Gene: Gwilliam\_40 Start: 36610, Stop: 36921, Start Num: 7

Candidate Starts for Gwilliam\_40:

(Start: 6 @36607 has 101 MA's), (Start: 7 @36610 has 248 MA's), (Start: 16 @36673 has 8 MA's), (19, 36688), (Start: 21 @36697 has 15 MA's), (22, 36700), (30, 36736), (48, 36823), (65, 36913),

Gene: Gyarad\_0040 Start: 36609, Stop: 36923, Start Num: 6

Candidate Starts for Gyarad\_0040:

(Start: 6 @36609 has 101 MA's), (Start: 7 @36612 has 248 MA's), (Start: 16 @36675 has 8 MA's), (19, 36690), (Start: 21 @36699 has 15 MA's), (22, 36702), (30, 36738), (48, 36825), (65, 36915),

Gene: HSavage\_40 Start: 36613, Stop: 36927, Start Num: 6

Candidate Starts for HSavage\_40:

(Start: 6 @36613 has 101 MA's), (Start: 7 @36616 has 248 MA's), (Start: 16 @36679 has 8 MA's), (19, 36694), (Start: 21 @36703 has 15 MA's), (22, 36706), (30, 36742), (48, 36829), (65, 36919),

Gene: Haimas\_40 Start: 36607, Stop: 36918, Start Num: 7

Candidate Starts for Haimas\_40:

(Start: 6 @36604 has 101 MA's), (Start: 7 @36607 has 248 MA's), (Start: 16 @36670 has 8 MA's), (19, 36685), (Start: 21 @36694 has 15 MA's), (22, 36697), (30, 36733), (48, 36820), (65, 36910),

Gene: Haleema\_39 Start: 36330, Stop: 36641, Start Num: 7

Candidate Starts for Haleema\_39:

(Start: 6 @36327 has 101 MA's), (Start: 7 @36330 has 248 MA's), (Start: 16 @36393 has 8 MA's), (19, 36408), (Start: 21 @36417 has 15 MA's), (22, 36420), (30, 36456), (48, 36543), (65, 36633),

Gene: Halfpint\_39 Start: 37079, Stop: 37402, Start Num: 7

Candidate Starts for Halfpint\_39:

(2, 36791), (Start: 7 @37079 has 248 MA's), (Start: 21 @37166 has 15 MA's), (49, 37289), (54, 37310), (60, 37370), (63, 37379),

Gene: Hally898\_36 Start: 35912, Stop: 36223, Start Num: 7

Candidate Starts for Hally898\_36:

(Start: 6 @35909 has 101 MA's), (Start: 7 @35912 has 248 MA's), (Start: 16 @35975 has 8 MA's), (19, 35990), (20, 35996), (Start: 21 @35999 has 15 MA's), (24, 36011), (30, 36038), (38, 36077), (47, 36122), (48, 36125), (54, 36146), (57, 36179),

Gene: Hamish\_40 Start: 36599, Stop: 36910, Start Num: 7

Candidate Starts for Hamish\_40:

(Start: 6 @36596 has 101 MA's), (Start: 7 @36599 has 248 MA's), (Start: 16 @36662 has 8 MA's), (19, 36677), (Start: 21 @36686 has 15 MA's), (22, 36689), (30, 36725), (48, 36812), (65, 36902),

Gene: Hangman\_37 Start: 36920, Stop: 37234, Start Num: 6

Candidate Starts for Hangman\_37:

(Start: 6 @36920 has 101 MA's), (Start: 7 @36923 has 248 MA's), (Start: 16 @36986 has 8 MA's), (19, 37001), (20, 37007), (Start: 21 @37010 has 15 MA's), (24, 37022), (30, 37049), (38, 37088), (47,

37133), (48, 37136), (57, 37190), (60, 37214),

Gene: Hartsy\_40 Start: 36650, Stop: 36961, Start Num: 7

Candidate Starts for Hartsy\_40:

(Start: 6 @36647 has 101 MA's), (Start: 7 @36650 has 248 MA's), (Start: 16 @36713 has 8 MA's), (19, 36728), (Start: 21 @36737 has 15 MA's), (22, 36740), (30, 36776), (48, 36863), (65, 36953),

Gene: Harvey\_40 Start: 36625, Stop: 36936, Start Num: 7

Candidate Starts for Harvey\_40:

(Start: 6 @36622 has 101 MA's), (Start: 7 @36625 has 248 MA's), (Start: 16 @36688 has 8 MA's), (19, 36703), (Start: 21 @36712 has 15 MA's), (22, 36715), (30, 36751), (48, 36838), (65, 36928),

Gene: HarveySr\_40 Start: 37333, Stop: 37569, Start Num: 21

Candidate Starts for HarveySr\_40:

(2, 36958), (Start: 21 @37333 has 15 MA's), (49, 37456), (54, 37477), (60, 37537), (63, 37546),

Gene: Hashim76\_43 Start: 36042, Stop: 36353, Start Num: 7

Candidate Starts for Hashim76\_43:

(Start: 6 @36039 has 101 MA's), (Start: 7 @36042 has 248 MA's), (10, 36072), (Start: 16 @36105 has 8 MA's), (19, 36120), (65, 36345),

Gene: Heath\_36 Start: 36530, Stop: 36841, Start Num: 7

Candidate Starts for Heath\_36:

(Start: 6 @36527 has 101 MA's), (Start: 7 @36530 has 248 MA's), (Start: 16 @36593 has 8 MA's), (19, 36608), (20, 36614), (Start: 21 @36617 has 15 MA's), (24, 36629), (30, 36656), (38, 36695), (47, 36740), (48, 36743), (54, 36764), (57, 36797),

Gene: Heathcliff\_40 Start: 37311, Stop: 37547, Start Num: 21

Candidate Starts for Heathcliff\_40:

(2, 36936), (Start: 21 @37311 has 15 MA's), (49, 37434), (54, 37455), (60, 37515), (63, 37524),

Gene: Hedgerow\_41 Start: 37836, Stop: 38201, Start Num: 4

Candidate Starts for Hedgerow\_41:

(Start: 4 @37836 has 27 MA's), (Start: 6 @37878 has 101 MA's), (Start: 7 @37881 has 248 MA's), (11, 37917), (Start: 16 @37944 has 8 MA's), (19, 37959), (24, 37980), (32, 38019), (56, 38142), (57, 38154), (62, 38184),

Gene: Held\_40 Start: 36314, Stop: 36625, Start Num: 7

Candidate Starts for Held\_40:

(Start: 6 @36311 has 101 MA's), (Start: 7 @36314 has 248 MA's), (Start: 16 @36377 has 8 MA's), (19, 36392), (Start: 21 @36401 has 15 MA's), (22, 36404), (30, 36440), (48, 36527), (65, 36617),

Gene: HenryJackson\_39 Start: 36330, Stop: 36641, Start Num: 7

Candidate Starts for HenryJackson\_39:

(Start: 6 @36327 has 101 MA's), (Start: 7 @36330 has 248 MA's), (Start: 16 @36393 has 8 MA's), (19, 36408), (Start: 21 @36417 has 15 MA's), (22, 36420), (30, 36456), (48, 36543), (65, 36633),

Gene: Hertubise\_40 Start: 36618, Stop: 36932, Start Num: 6

Candidate Starts for Hertubise\_40:

(Start: 6 @36618 has 101 MA's), (Start: 7 @36621 has 248 MA's), (Start: 16 @36684 has 8 MA's), (19, 36699), (Start: 21 @36708 has 15 MA's), (22, 36711), (30, 36747), (48, 36834), (65, 36924),

Gene: Hetaeria\_40 Start: 36623, Stop: 36934, Start Num: 7

Candidate Starts for Hetaeria\_40:

(Start: 6 @36620 has 101 MA's), (Start: 7 @36623 has 248 MA's), (Start: 16 @36686 has 8 MA's), (19, 36701), (Start: 21 @36710 has 15 MA's), (22, 36713), (30, 36749), (48, 36836), (65, 36926),

Gene: HighStump\_39 Start: 36310, Stop: 36624, Start Num: 6

Candidate Starts for HighStump\_39:

(Start: 6 @36310 has 101 MA's), (Start: 7 @36313 has 248 MA's), (Start: 16 @36376 has 8 MA's), (19, 36391), (Start: 21 @36400 has 15 MA's), (22, 36403), (30, 36439), (48, 36526), (65, 36616),

Gene: Hocus\_39 Start: 36319, Stop: 36633, Start Num: 6

Candidate Starts for Hocus\_39:

(Start: 6 @36319 has 101 MA's), (Start: 7 @36322 has 248 MA's), (Start: 16 @36385 has 8 MA's), (19, 36400), (Start: 21 @36409 has 15 MA's), (22, 36412), (30, 36448), (48, 36535), (65, 36625),

Gene: Holeinone\_41 Start: 37716, Stop: 38081, Start Num: 4

Candidate Starts for Holeinone\_41:

(Start: 4 @37716 has 27 MA's), (Start: 6 @37758 has 101 MA's), (Start: 7 @37761 has 248 MA's), (11, 37797), (Start: 16 @37824 has 8 MA's), (19, 37839), (24, 37860), (32, 37899), (56, 38022), (57, 38034), (62, 38064),

Gene: Horchata\_40 Start: 36601, Stop: 36912, Start Num: 7

Candidate Starts for Horchata\_40:

(Start: 6 @36598 has 101 MA's), (Start: 7 @36601 has 248 MA's), (Start: 16 @36664 has 8 MA's), (19, 36679), (Start: 21 @36688 has 15 MA's), (22, 36691), (30, 36727), (48, 36814), (65, 36904),

Gene: Hosp\_032 Start: 33115, Stop: 33429, Start Num: 7

Candidate Starts for Hosp\_032:

(Start: 6 @33112 has 101 MA's), (Start: 7 @33115 has 248 MA's), (Start: 16 @33178 has 8 MA's), (18, 33187), (19, 33196), (Start: 21 @33205 has 15 MA's), (24, 33217), (48, 33331), (54, 33352), (57, 33385),

Gene: Hydro\_37 Start: 36940, Stop: 37251, Start Num: 7

Candidate Starts for Hydro\_37:

(Start: 6 @36937 has 101 MA's), (Start: 7 @36940 has 248 MA's), (Start: 16 @37003 has 8 MA's), (19, 37018), (20, 37024), (Start: 21 @37027 has 15 MA's), (24, 37039), (30, 37066), (38, 37105), (47, 37150), (48, 37153), (57, 37207), (60, 37231),

Gene: ImtiyazSitla\_39 Start: 36164, Stop: 36475, Start Num: 7

Candidate Starts for ImtiyazSitla\_39:

(Start: 6 @36161 has 101 MA's), (Start: 7 @36164 has 248 MA's), (Start: 16 @36227 has 8 MA's), (19, 36242), (Start: 21 @36251 has 15 MA's), (30, 36290), (48, 36377),

Gene: Imvubu\_33 Start: 33638, Stop: 33946, Start Num: 7

Candidate Starts for Imvubu\_33:

(Start: 7 @33638 has 248 MA's), (Start: 9 @33662 has 1 MA's), (Start: 16 @33701 has 8 MA's), (18, 33707), (19, 33716), (Start: 21 @33725 has 15 MA's), (24, 33737), (28, 33752), (31, 33767), (35, 33794), (38, 33803), (57, 33902),

Gene: Inchworm\_40 Start: 36599, Stop: 36910, Start Num: 7

Candidate Starts for Inchworm\_40:

(Start: 6 @36596 has 101 MA's), (Start: 7 @36599 has 248 MA's), (Start: 16 @36662 has 8 MA's), (19, 36677), (Start: 21 @36686 has 15 MA's), (30, 36725), (48, 36812),

Gene: Indlovu\_38 Start: 36164, Stop: 36469, Start Num: 7

Candidate Starts for Indlovu\_38:

(Start: 7 @36164 has 248 MA's), (Start: 16 @36227 has 8 MA's), (19, 36242), (Start: 21 @36251 has 15 MA's), (23, 36260), (45, 36371),

Gene: Inverness\_40 Start: 36610, Stop: 36924, Start Num: 6

Candidate Starts for Inverness\_40:

(Start: 6 @36610 has 101 MA's), (Start: 7 @36613 has 248 MA's), (Start: 16 @36676 has 8 MA's), (19, 36691), (Start: 21 @36700 has 15 MA's), (22, 36703), (30, 36739), (48, 36826), (65, 36916),

Gene: Iridessa\_40 Start: 36315, Stop: 36626, Start Num: 7

Candidate Starts for Iridessa\_40:

(Start: 6 @36312 has 101 MA's), (Start: 7 @36315 has 248 MA's), (Start: 16 @36378 has 8 MA's), (19, 36393), (Start: 21 @36402 has 15 MA's), (30, 36441), (48, 36528), (65, 36618),

Gene: Iridoclysis\_40 Start: 36593, Stop: 36904, Start Num: 7

Candidate Starts for Iridoclysis\_40:

(Start: 6 @36590 has 101 MA's), (Start: 7 @36593 has 248 MA's), (Start: 16 @36656 has 8 MA's), (19, 36671), (Start: 21 @36680 has 15 MA's), (22, 36683), (30, 36719), (48, 36806), (65, 36896),

Gene: IsaacEli\_40 Start: 36617, Stop: 36928, Start Num: 7

Candidate Starts for IsaacEli\_40:

(Start: 6 @36614 has 101 MA's), (Start: 7 @36617 has 248 MA's), (Start: 16 @36680 has 8 MA's), (19, 36695), (Start: 21 @36704 has 15 MA's), (22, 36707), (30, 36743), (48, 36830), (65, 36920),

Gene: ItsyBitsy1\_41 Start: 37718, Stop: 38083, Start Num: 4

Candidate Starts for ItsyBitsy1\_41:

(Start: 4 @37718 has 27 MA's), (Start: 6 @37760 has 101 MA's), (Start: 7 @37763 has 248 MA's), (11, 37799), (Start: 16 @37826 has 8 MA's), (19, 37841), (24, 37862), (32, 37901), (56, 38024), (57, 38036), (62, 38066),

Gene: JAMaL\_37 Start: 37111, Stop: 37422, Start Num: 7

Candidate Starts for JAMaL\_37:

(Start: 6 @37108 has 101 MA's), (Start: 7 @37111 has 248 MA's), (Start: 16 @37174 has 8 MA's), (19, 37189), (20, 37195), (Start: 21 @37198 has 15 MA's), (24, 37210), (30, 37237), (38, 37276), (47, 37321), (48, 37324), (57, 37378), (60, 37402),

Gene: JDog\_39 Start: 36330, Stop: 36641, Start Num: 7

Candidate Starts for JDog\_39:

(Start: 6 @36327 has 101 MA's), (Start: 7 @36330 has 248 MA's), (Start: 16 @36393 has 8 MA's), (19, 36408), (Start: 21 @36417 has 15 MA's), (30, 36456), (48, 36543),

Gene: JacAttac\_40 Start: 36596, Stop: 36910, Start Num: 6

Candidate Starts for JacAttac\_40:

(Start: 6 @36596 has 101 MA's), (Start: 7 @36599 has 248 MA's), (Start: 16 @36662 has 8 MA's), (19, 36677), (Start: 21 @36686 has 15 MA's), (22, 36689), (30, 36725), (48, 36812), (65, 36902),

Gene: Jackstina\_37 Start: 37183, Stop: 37506, Start Num: 7

Candidate Starts for Jackstina\_37:

(2, 36895), (Start: 7 @37183 has 248 MA's), (Start: 21 @37270 has 15 MA's), (49, 37393), (54, 37414), (60, 37474), (63, 37483),

Gene: JaguarMi\_37 Start: 36406, Stop: 36717, Start Num: 7

Candidate Starts for JaguarMi\_37:

(Start: 6 @36403 has 101 MA's), (Start: 7 @36406 has 248 MA's), (Start: 16 @36469 has 8 MA's), (19, 36484), (20, 36490), (Start: 21 @36493 has 15 MA's), (24, 36505), (30, 36532), (38, 36571), (47, 36616), (48, 36619), (57, 36673), (60, 36697),

Gene: JakeO\_39 Start: 36332, Stop: 36643, Start Num: 7

Candidate Starts for JakeO\_39:

(Start: 6 @36329 has 101 MA's), (Start: 7 @36332 has 248 MA's), (Start: 16 @36395 has 8 MA's), (19, 36410), (Start: 21 @36419 has 15 MA's), (30, 36458), (48, 36545), (65, 36635),

Gene: JangoPhett\_40 Start: 36598, Stop: 36912, Start Num: 6

Candidate Starts for JangoPhett\_40:

(Start: 6 @36598 has 101 MA's), (Start: 7 @36601 has 248 MA's), (Start: 16 @36664 has 8 MA's), (19, 36679), (Start: 21 @36688 has 15 MA's), (22, 36691), (30, 36727), (48, 36814), (65, 36904),

Gene: Jeon\_35 Start: 36241, Stop: 36525, Start Num: 16

Candidate Starts for Jeon\_35:

(Start: 16 @36241 has 8 MA's), (24, 36280), (26, 36289), (36, 36340), (39, 36355), (42, 36391), (53, 36424), (57, 36466), (63, 36499),

Gene: Jesabah\_40 Start: 36332, Stop: 36643, Start Num: 7

Candidate Starts for Jesabah\_40:

(Start: 6 @36329 has 101 MA's), (Start: 7 @36332 has 248 MA's), (Start: 16 @36395 has 8 MA's), (19, 36410), (Start: 21 @36419 has 15 MA's), (22, 36422), (30, 36458), (48, 36545), (65, 36635),

Gene: Jillium\_39 Start: 36320, Stop: 36634, Start Num: 6

Candidate Starts for Jillium\_39:

(Start: 6 @36320 has 101 MA's), (Start: 7 @36323 has 248 MA's), (Start: 16 @36386 has 8 MA's), (19, 36401), (Start: 21 @36410 has 15 MA's), (22, 36413), (30, 36449), (48, 36536), (65, 36626),

Gene: Jiminy\_39 Start: 36167, Stop: 36478, Start Num: 7

Candidate Starts for Jiminy\_39:

(Start: 6 @36164 has 101 MA's), (Start: 7 @36167 has 248 MA's), (Start: 16 @36230 has 8 MA's), (19, 36245), (Start: 21 @36254 has 15 MA's), (30, 36293), (48, 36380),

Gene: Jiraiya\_39 Start: 36320, Stop: 36631, Start Num: 7

Candidate Starts for Jiraiya\_39:

(Start: 6 @36317 has 101 MA's), (Start: 7 @36320 has 248 MA's), (Start: 16 @36383 has 8 MA's), (19, 36398), (Start: 21 @36407 has 15 MA's), (30, 36446), (48, 36533),

Gene: Jolie1\_034 Start: 34902, Stop: 35216, Start Num: 7

Candidate Starts for Jolie1\_034:

(Start: 6 @34899 has 101 MA's), (Start: 7 @34902 has 248 MA's), (Start: 16 @34965 has 8 MA's), (18, 34974), (19, 34983), (Start: 21 @34992 has 15 MA's), (24, 35004), (48, 35118), (54, 35139), (57, 35172),

Gene: Jollymon\_56 Start: 30719, Stop: 30940, Start Num: 12

Candidate Starts for Jollymon\_56:

(Start: 12 @30719 has 4 MA's), (25, 30785), (26, 30788), (33, 30803), (55, 30881), (58, 30911), (60, 30932),

Gene: KLucky39\_40 Start: 36608, Stop: 36922, Start Num: 6

Candidate Starts for KLucky39\_40:



(Start: 6 @36608 has 101 MA's), (Start: 7 @36611 has 248 MA's), (Start: 16 @36674 has 8 MA's), (19, 36689), (Start: 21 @36698 has 15 MA's), (22, 36701), (30, 36737), (48, 36824), (65, 36914),

Gene: Kahve\_39 Start: 36327, Stop: 36638, Start Num: 7

Candidate Starts for Kahve\_39:

(Start: 6 @36324 has 101 MA's), (Start: 7 @36327 has 248 MA's), (Start: 16 @36390 has 8 MA's), (19, 36405), (Start: 21 @36414 has 15 MA's), (22, 36417), (30, 36453), (48, 36540), (65, 36630),

Gene: Kailash\_40 Start: 36665, Stop: 36976, Start Num: 7

Candidate Starts for Kailash\_40:

(Start: 6 @36662 has 101 MA's), (Start: 7 @36665 has 248 MA's), (Start: 16 @36728 has 8 MA's), (19, 36743), (Start: 21 @36752 has 15 MA's), (22, 36755), (30, 36791), (48, 36878), (65, 36968),

Gene: Kaleb\_41 Start: 37851, Stop: 38216, Start Num: 4

Candidate Starts for Kaleb\_41:

(Start: 4 @37851 has 27 MA's), (Start: 6 @37893 has 101 MA's), (Start: 7 @37896 has 248 MA's), (11, 37932), (Start: 16 @37959 has 8 MA's), (19, 37974), (24, 37995), (32, 38034), (56, 38157), (57, 38169), (62, 38199),

Gene: Kamiyu\_40 Start: 37232, Stop: 37555, Start Num: 7

Candidate Starts for Kamiyu\_40:

(2, 36944), (Start: 7 @37232 has 248 MA's), (Start: 21 @37319 has 15 MA's), (49, 37442), (54, 37463), (60, 37523), (63, 37532),

Gene: KarasumaRum\_41 Start: 37354, Stop: 37674, Start Num: 7

Candidate Starts for KarasumaRum\_41:

(Start: 6 @37351 has 101 MA's), (Start: 7 @37354 has 248 MA's), (Start: 16 @37417 has 8 MA's), (18, 37423), (19, 37432), (Start: 21 @37441 has 15 MA's), (23, 37450), (25, 37459), (26, 37462), (60, 37645),

Gene: Katniss\_40 Start: 36626, Stop: 36937, Start Num: 7

Candidate Starts for Katniss\_40:

(Start: 6 @36623 has 101 MA's), (Start: 7 @36626 has 248 MA's), (Start: 16 @36689 has 8 MA's), (19, 36704), (Start: 21 @36713 has 15 MA's), (22, 36716), (30, 36752), (48, 36839), (65, 36929),

Gene: KayaCho\_34 Start: 34898, Stop: 35212, Start Num: 7

Candidate Starts for KayaCho\_34:

(Start: 6 @34895 has 101 MA's), (Start: 7 @34898 has 248 MA's), (Start: 16 @34961 has 8 MA's), (18, 34970), (19, 34979), (Start: 21 @34988 has 15 MA's), (24, 35000), (48, 35114), (54, 35135), (57, 35168),

Gene: Keitherie\_40 Start: 36664, Stop: 36975, Start Num: 7

Candidate Starts for Keitherie\_40:

(Start: 6 @36661 has 101 MA's), (Start: 7 @36664 has 248 MA's), (Start: 16 @36727 has 8 MA's), (19, 36742), (Start: 21 @36751 has 15 MA's), (22, 36754), (30, 36790), (48, 36877), (65, 36967),

Gene: Khan1\_40 Start: 36348, Stop: 36659, Start Num: 7

Candidate Starts for Khan1\_40:

(Start: 6 @36345 has 101 MA's), (Start: 7 @36348 has 248 MA's), (Start: 16 @36411 has 8 MA's), (19, 36426), (Start: 21 @36435 has 15 MA's), (22, 36438), (30, 36474), (48, 36561), (65, 36651),

Gene: Kheth\_41 Start: 37739, Stop: 38104, Start Num: 4

Candidate Starts for Kheth\_41:

(Start: 4 @37739 has 27 MA's), (Start: 6 @37781 has 101 MA's), (Start: 7 @37784 has 248 MA's), (11, 37820), (Start: 16 @37847 has 8 MA's), (19, 37862), (24, 37883), (32, 37922), (56, 38045), (57, 38057), (62, 38087),

Gene: Kikipoo\_40 Start: 36617, Stop: 36928, Start Num: 7

Candidate Starts for Kikipoo\_40:

(Start: 6 @36614 has 101 MA's), (Start: 7 @36617 has 248 MA's), (Start: 16 @36680 has 8 MA's), (19, 36695), (Start: 21 @36704 has 15 MA's), (22, 36707), (30, 36743), (48, 36830), (65, 36920),

Gene: Kimbrough\_40 Start: 36316, Stop: 36630, Start Num: 6

Candidate Starts for Kimbrough\_40:

(Start: 6 @36316 has 101 MA's), (Start: 7 @36319 has 248 MA's), (Start: 16 @36382 has 8 MA's), (19, 36397), (Start: 21 @36406 has 15 MA's), (22, 36409), (30, 36445), (48, 36532), (65, 36622),

Gene: KingTut\_31 Start: 31988, Stop: 32299, Start Num: 7

Candidate Starts for KingTut\_31:

(Start: 6 @31985 has 101 MA's), (Start: 7 @31988 has 248 MA's), (Start: 16 @32051 has 8 MA's), (19, 32066), (Start: 21 @32075 has 15 MA's), (22, 32078), (30, 32114), (48, 32201), (65, 32291),

Gene: KingVeVeVe\_40 Start: 36592, Stop: 36903, Start Num: 7

Candidate Starts for KingVeVeVe\_40:

(Start: 6 @36589 has 101 MA's), (Start: 7 @36592 has 248 MA's), (Start: 16 @36655 has 8 MA's), (19, 36670), (Start: 21 @36679 has 15 MA's), (22, 36682), (30, 36718), (48, 36805), (65, 36895),

Gene: KingstonB\_56 Start: 30198, Stop: 30419, Start Num: 12

Candidate Starts for KingstonB\_56:

(Start: 12 @30198 has 4 MA's), (Start: 21 @30246 has 15 MA's), (25, 30264), (26, 30267), (33, 30282), (55, 30360), (58, 30390), (60, 30411),

Gene: KlimbOn\_40 Start: 36605, Stop: 36916, Start Num: 7

Candidate Starts for KlimbOn\_40:

(Start: 6 @36602 has 101 MA's), (Start: 7 @36605 has 248 MA's), (Start: 16 @36668 has 8 MA's), (19, 36683), (Start: 21 @36692 has 15 MA's), (22, 36695), (30, 36731), (48, 36818), (65, 36908),

Gene: Kloppinator\_40 Start: 36628, Stop: 36939, Start Num: 7

Candidate Starts for Kloppinator\_40:

(Start: 6 @36625 has 101 MA's), (Start: 7 @36628 has 248 MA's), (Start: 16 @36691 has 8 MA's), (19, 36706), (Start: 21 @36715 has 15 MA's), (22, 36718), (30, 36754), (48, 36841), (65, 36931),

Gene: Klocker\_41 Start: 38602, Stop: 38913, Start Num: 6

Candidate Starts for Klocker\_41:

(Start: 6 @38602 has 101 MA's), (Start: 7 @38605 has 248 MA's), (10, 38635), (Start: 16 @38668 has 8 MA's), (18, 38674), (19, 38683), (26, 38713), (38, 38770), (57, 38869),

Gene: Kolhan\_41 Start: 37730, Stop: 38095, Start Num: 4

Candidate Starts for Kolhan\_41:

(Start: 4 @37730 has 27 MA's), (Start: 6 @37772 has 101 MA's), (Start: 7 @37775 has 248 MA's), (11, 37811), (Start: 16 @37838 has 8 MA's), (19, 37853), (24, 37874), (32, 37913), (56, 38036), (57, 38048), (62, 38078),

Gene: Kronus\_39 Start: 37929, Stop: 38165, Start Num: 21

Candidate Starts for Kronus\_39:

(2, 37554), (Start: 7 @37842 has 248 MA's), (Start: 21 @37929 has 15 MA's), (49, 38052), (54, 38073), (60, 38133), (63, 38142),

Gene: Kwadwo\_39 Start: 36306, Stop: 36620, Start Num: 6

Candidate Starts for Kwadwo\_39:

(Start: 6 @36306 has 101 MA's), (Start: 7 @36309 has 248 MA's), (Start: 16 @36372 has 8 MA's), (19, 36387), (Start: 21 @36396 has 15 MA's), (22, 36399), (30, 36435), (48, 36522), (65, 36612),

Gene: Kwksand96\_39 Start: 36178, Stop: 36489, Start Num: 7

Candidate Starts for Kwksand96\_39:

(Start: 6 @36175 has 101 MA's), (Start: 7 @36178 has 248 MA's), (Start: 16 @36241 has 8 MA's), (19, 36256), (Start: 21 @36265 has 15 MA's), (30, 36304), (48, 36391),

Gene: Labeouficaum\_39 Start: 36170, Stop: 36484, Start Num: 6

Candidate Starts for Labeouficaum\_39:

(Start: 6 @36170 has 101 MA's), (Start: 7 @36173 has 248 MA's), (Start: 16 @36236 has 8 MA's), (19, 36251), (Start: 21 @36260 has 15 MA's), (30, 36299), (48, 36386),

Gene: Lambano\_36 Start: 35912, Stop: 36223, Start Num: 7

Candidate Starts for Lambano\_36:

(Start: 6 @35909 has 101 MA's), (Start: 7 @35912 has 248 MA's), (Start: 16 @35975 has 8 MA's), (19, 35990), (20, 35996), (Start: 21 @35999 has 15 MA's), (24, 36011), (30, 36038), (38, 36077), (47, 36122), (48, 36125), (54, 36146), (57, 36179),

Gene: Lars\_41 Start: 37841, Stop: 38206, Start Num: 4

Candidate Starts for Lars\_41:

(Start: 4 @37841 has 27 MA's), (Start: 6 @37883 has 101 MA's), (Start: 7 @37886 has 248 MA's), (11, 37922), (Start: 16 @37949 has 8 MA's), (19, 37964), (24, 37985), (32, 38024), (56, 38147), (57, 38159), (62, 38189),

Gene: LasagnaCat\_40 Start: 36611, Stop: 36922, Start Num: 7

Candidate Starts for LasagnaCat\_40:

(Start: 6 @36608 has 101 MA's), (Start: 7 @36611 has 248 MA's), (Start: 16 @36674 has 8 MA's), (19, 36689), (Start: 21 @36698 has 15 MA's), (30, 36737), (48, 36824),

Gene: Lasso\_40 Start: 36584, Stop: 36895, Start Num: 7

Candidate Starts for Lasso\_40:

(Start: 6 @36581 has 101 MA's), (Start: 7 @36584 has 248 MA's), (Start: 16 @36647 has 8 MA's), (19, 36662), (Start: 21 @36671 has 15 MA's), (22, 36674), (30, 36710), (48, 36797), (65, 36887),

Gene: Laurie\_40 Start: 37240, Stop: 37605, Start Num: 4

Candidate Starts for Laurie\_40:

(Start: 4 @37240 has 27 MA's), (Start: 6 @37282 has 101 MA's), (Start: 7 @37285 has 248 MA's), (11, 37321), (Start: 16 @37348 has 8 MA's), (24, 37384), (32, 37423), (56, 37546), (57, 37558), (62, 37588),

Gene: LeeLot\_40 Start: 36612, Stop: 36926, Start Num: 6

Candidate Starts for LeeLot\_40:

(Start: 6 @36612 has 101 MA's), (Start: 7 @36615 has 248 MA's), (Start: 16 @36678 has 8 MA's), (19, 36693), (Start: 21 @36702 has 15 MA's), (22, 36705), (30, 36741), (48, 36828), (65, 36918),

Gene: Legolas\_39 Start: 36325, Stop: 36636, Start Num: 7

Candidate Starts for Legolas\_39:

(Start: 6 @36322 has 101 MA's), (Start: 7 @36325 has 248 MA's), (Start: 16 @36388 has 8 MA's), (19, 36403), (Start: 21 @36412 has 15 MA's), (22, 36415), (30, 36451), (48, 36538), (65, 36628),

Gene: LeiMonet\_40 Start: 36316, Stop: 36627, Start Num: 7

Candidate Starts for LeiMonet\_40:

(Start: 6 @36313 has 101 MA's), (Start: 7 @36316 has 248 MA's), (Start: 16 @36379 has 8 MA's), (19, 36394), (Start: 21 @36403 has 15 MA's), (22, 36406), (30, 36442), (48, 36529), (65, 36619),

Gene: LemonSlice\_40 Start: 36312, Stop: 36623, Start Num: 7

Candidate Starts for LemonSlice\_40:

(Start: 6 @36309 has 101 MA's), (Start: 7 @36312 has 248 MA's), (Start: 16 @36375 has 8 MA's), (19, 36390), (Start: 21 @36399 has 15 MA's), (22, 36402), (30, 36438), (48, 36525), (65, 36615),

Gene: Lephleur\_41 Start: 37776, Stop: 38099, Start Num: 6

Candidate Starts for Lephleur\_41:

(Start: 4 @37734 has 27 MA's), (Start: 6 @37776 has 101 MA's), (Start: 7 @37779 has 248 MA's), (11, 37815), (Start: 16 @37842 has 8 MA's), (19, 37857), (24, 37878), (32, 37917), (56, 38040), (57, 38052), (62, 38082),

Gene: LestyG\_40 Start: 37263, Stop: 37586, Start Num: 7

Candidate Starts for LestyG\_40:

(2, 36975), (Start: 7 @37263 has 248 MA's), (Start: 21 @37350 has 15 MA's), (49, 37473), (54, 37494), (60, 37554), (63, 37563),

Gene: Ligma\_33 Start: 29709, Stop: 30020, Start Num: 5

Candidate Starts for Ligma\_33:

(Start: 5 @29709 has 18 MA's), (11, 29763), (27, 29841), (28, 29844), (57, 29979),

Gene: LilMcDreamy\_36 Start: 36325, Stop: 36642, Start Num: 7

Candidate Starts for LilMcDreamy\_36:

(Start: 6 @36322 has 101 MA's), (Start: 7 @36325 has 248 MA's), (Start: 16 @36388 has 8 MA's), (17, 36391), (18, 36394), (19, 36403), (Start: 21 @36412 has 15 MA's), (23, 36421), (26, 36433), (48, 36538), (57, 36592), (60, 36616),

Gene: LilSmirk\_41 Start: 37728, Stop: 38093, Start Num: 4

Candidate Starts for LilSmirk\_41:

(Start: 4 @37728 has 27 MA's), (Start: 6 @37770 has 101 MA's), (Start: 7 @37773 has 248 MA's), (11, 37809), (Start: 16 @37836 has 8 MA's), (19, 37851), (24, 37872), (32, 37911), (56, 38034), (57, 38046), (62, 38076),

Gene: LittleMunchkin\_35 Start: 33126, Stop: 33437, Start Num: 5

Candidate Starts for LittleMunchkin\_35:

(Start: 5 @33126 has 18 MA's), (28, 33261), (57, 33396),

Gene: LizLemon\_41 Start: 37850, Stop: 38215, Start Num: 4

Candidate Starts for LizLemon\_41:

(Start: 4 @37850 has 27 MA's), (Start: 6 @37892 has 101 MA's), (Start: 7 @37895 has 248 MA's), (11, 37931), (Start: 16 @37958 has 8 MA's), (19, 37973), (24, 37994), (32, 38033), (56, 38156), (57, 38168), (62, 38198),

Gene: Lolalove\_37 Start: 36934, Stop: 37248, Start Num: 6

Candidate Starts for Lolalove\_37:

(Start: 6 @36934 has 101 MA's), (Start: 7 @36937 has 248 MA's), (Start: 16 @37000 has 8 MA's), (19, 37015), (20, 37021), (Start: 21 @37024 has 15 MA's), (24, 37036), (30, 37063), (38, 37102), (47, 37147), (48, 37150), (57, 37204), (60, 37228),

Gene: Longacauda\_39 Start: 36317, Stop: 36628, Start Num: 7

Candidate Starts for Longacauda\_39:

(Start: 6 @36314 has 101 MA's), (Start: 7 @36317 has 248 MA's), (Start: 16 @36380 has 8 MA's), (19, 36395), (Start: 21 @36404 has 15 MA's), (22, 36407), (30, 36443), (48, 36530),

Gene: Lopsy\_39 Start: 36167, Stop: 36478, Start Num: 7

Candidate Starts for Lopsy\_39:

(Start: 6 @36164 has 101 MA's), (Start: 7 @36167 has 248 MA's), (Start: 16 @36230 has 8 MA's), (19, 36245), (Start: 21 @36254 has 15 MA's), (22, 36257), (30, 36293), (48, 36380), (65, 36470),

Gene: LostAndPhound\_39 Start: 36318, Stop: 36629, Start Num: 7

Candidate Starts for LostAndPhound\_39:

(Start: 6 @36315 has 101 MA's), (Start: 7 @36318 has 248 MA's), (Start: 16 @36381 has 8 MA's), (19, 36396), (Start: 21 @36405 has 15 MA's), (22, 36408), (30, 36444), (48, 36531), (65, 36621),

Gene: LuckyMarjie\_39 Start: 36324, Stop: 36638, Start Num: 6

Candidate Starts for LuckyMarjie\_39:

(Start: 6 @36324 has 101 MA's), (Start: 7 @36327 has 248 MA's), (Start: 16 @36390 has 8 MA's), (19, 36405), (Start: 21 @36414 has 15 MA's), (22, 36417), (30, 36453), (48, 36540), (65, 36630),

Gene: Lulumae\_39 Start: 36306, Stop: 36620, Start Num: 6

Candidate Starts for Lulumae\_39:

(Start: 6 @36306 has 101 MA's), (Start: 7 @36309 has 248 MA's), (Start: 16 @36372 has 8 MA's), (19, 36387), (Start: 21 @36396 has 15 MA's), (22, 36399), (30, 36435), (48, 36522), (65, 36612),

Gene: Lulwa\_40 Start: 36596, Stop: 36907, Start Num: 7

Candidate Starts for Lulwa\_40:

(Start: 6 @36593 has 101 MA's), (Start: 7 @36596 has 248 MA's), (Start: 16 @36659 has 8 MA's), (19, 36674), (Start: 21 @36683 has 15 MA's), (22, 36686), (30, 36722), (48, 36809), (65, 36899),

Gene: Lumine\_39 Start: 36302, Stop: 36616, Start Num: 6

Candidate Starts for Lumine\_39:

(Start: 6 @36302 has 101 MA's), (Start: 7 @36305 has 248 MA's), (Start: 16 @36368 has 8 MA's), (19, 36383), (Start: 21 @36392 has 15 MA's), (22, 36395), (30, 36431), (48, 36518), (65, 36608),

Gene: MRabcd\_39 Start: 36309, Stop: 36620, Start Num: 7

Candidate Starts for MRabcd\_39:

(Start: 6 @36306 has 101 MA's), (Start: 7 @36309 has 248 MA's), (Start: 16 @36372 has 8 MA's), (19, 36387), (Start: 21 @36396 has 15 MA's), (22, 36399), (30, 36435), (48, 36522), (65, 36612),

Gene: Mag7\_39 Start: 36215, Stop: 36526, Start Num: 7

Candidate Starts for Mag7\_39:

(Start: 6 @36212 has 101 MA's), (Start: 7 @36215 has 248 MA's), (Start: 16 @36278 has 8 MA's), (19, 36293), (Start: 21 @36302 has 15 MA's), (22, 36305), (30, 36341), (48, 36428), (65, 36518),

Gene: Magic8\_40 Start: 36647, Stop: 36961, Start Num: 6

Candidate Starts for Magic8\_40:

(Start: 6 @36647 has 101 MA's), (Start: 7 @36650 has 248 MA's), (Start: 16 @36713 has 8 MA's), (19, 36728), (Start: 21 @36737 has 15 MA's), (30, 36776), (48, 36863),

Gene: Magpie\_36 Start: 36770, Stop: 37084, Start Num: 6

Candidate Starts for Magpie\_36:

(Start: 6 @36770 has 101 MA's), (Start: 7 @36773 has 248 MA's), (Start: 16 @36836 has 8 MA's), (19, 36851), (20, 36857), (Start: 21 @36860 has 15 MA's), (24, 36872), (30, 36899), (38, 36938), (47, 36983), (48, 36986), (57, 37040), (60, 37064),

Gene: MakoManhole\_35 Start: 31663, Stop: 31977, Start Num: 5

Candidate Starts for MakoManhole\_35:

(Start: 5 @31663 has 18 MA's), (Start: 12 @31723 has 4 MA's), (27, 31795), (28, 31798), (29, 31807), (46, 31879), (57, 31936),

Gene: Mana\_39 Start: 36321, Stop: 36635, Start Num: 6

Candidate Starts for Mana\_39:

(Start: 6 @36321 has 101 MA's), (Start: 7 @36324 has 248 MA's), (Start: 16 @36387 has 8 MA's), (19, 36402), (Start: 21 @36411 has 15 MA's), (22, 36414), (30, 36450), (48, 36537), (65, 36627),

Gene: Manad\_39 Start: 36163, Stop: 36477, Start Num: 6

Candidate Starts for Manad\_39:

(Start: 6 @36163 has 101 MA's), (Start: 7 @36166 has 248 MA's), (Start: 16 @36229 has 8 MA's), (19, 36244), (Start: 21 @36253 has 15 MA's), (22, 36256), (30, 36292), (48, 36379), (65, 36469),

Gene: Mariokart\_33 Start: 29652, Stop: 29963, Start Num: 5

Candidate Starts for Mariokart\_33:

(Start: 5 @29652 has 18 MA's), (11, 29706), (27, 29784), (57, 29922),

Gene: Marley1013\_40 Start: 38041, Stop: 38364, Start Num: 7

Candidate Starts for Marley1013\_40:

(2, 37753), (Start: 7 @38041 has 248 MA's), (Start: 21 @38128 has 15 MA's), (49, 38251), (54, 38272), (60, 38332), (63, 38341),

Gene: Marlia\_40 Start: 37244, Stop: 37567, Start Num: 7

Candidate Starts for Marlia\_40:

(2, 36956), (Start: 7 @37244 has 248 MA's), (Start: 21 @37331 has 15 MA's), (49, 37454), (54, 37475), (60, 37535), (63, 37544),

Gene: Maru\_39 Start: 36267, Stop: 36578, Start Num: 7

Candidate Starts for Maru\_39:

(Start: 6 @36264 has 101 MA's), (Start: 7 @36267 has 248 MA's), (Start: 16 @36330 has 8 MA's), (19, 36345), (Start: 21 @36354 has 15 MA's), (22, 36357), (30, 36393), (48, 36480), (65, 36570),

Gene: Maskar\_39 Start: 36164, Stop: 36475, Start Num: 7

Candidate Starts for Maskar\_39:

(Start: 6 @36161 has 101 MA's), (Start: 7 @36164 has 248 MA's), (Start: 16 @36227 has 8 MA's), (19, 36242), (Start: 21 @36251 has 15 MA's), (30, 36290), (48, 36377),

Gene: MasterPo\_41 Start: 37737, Stop: 38102, Start Num: 4

Candidate Starts for MasterPo\_41:

(Start: 4 @37737 has 27 MA's), (Start: 6 @37779 has 101 MA's), (Start: 7 @37782 has 248 MA's), (11, 37818), (Start: 16 @37845 has 8 MA's), (19, 37860), (24, 37881), (32, 37920), (56, 38043), (57, 38055), (62, 38085),

Gene: Matalotodo\_40 Start: 36610, Stop: 36921, Start Num: 7

Candidate Starts for Matalotodo\_40:

(Start: 6 @36607 has 101 MA's), (Start: 7 @36610 has 248 MA's), (Start: 16 @36673 has 8 MA's), (19, 36688), (Start: 21 @36697 has 15 MA's), (22, 36700), (30, 36736), (48, 36823), (65, 36913),

Gene: Mcshane\_39 Start: 36307, Stop: 36618, Start Num: 7

Candidate Starts for Mcshane\_39:

(Start: 6 @36304 has 101 MA's), (Start: 7 @36307 has 248 MA's), (Start: 16 @36370 has 8 MA's), (19, 36385), (Start: 21 @36394 has 15 MA's), (22, 36397), (30, 36433), (48, 36520), (65, 36610),

Gene: Mecca\_39 Start: 36310, Stop: 36621, Start Num: 7

Candidate Starts for Mecca\_39:

(Start: 6 @36307 has 101 MA's), (Start: 7 @36310 has 248 MA's), (Start: 16 @36373 has 8 MA's), (19, 36388), (Start: 21 @36397 has 15 MA's), (22, 36400), (30, 36436), (48, 36523), (65, 36613),

Gene: Megabear\_35 Start: 35678, Stop: 35962, Start Num: 16

Candidate Starts for Megabear\_35:

(Start: 16 @35678 has 8 MA's), (26, 35726), (36, 35777), (39, 35792), (40, 35798), (42, 35828), (53, 35861), (57, 35903), (63, 35936),

Gene: Megamind20\_40 Start: 36329, Stop: 36643, Start Num: 6

Candidate Starts for Megamind20\_40:

(Start: 6 @36329 has 101 MA's), (Start: 7 @36332 has 248 MA's), (Start: 16 @36395 has 8 MA's), (19, 36410), (Start: 21 @36419 has 15 MA's), (22, 36422), (30, 36458), (48, 36545), (65, 36635),

Gene: Megatron\_40 Start: 36608, Stop: 36919, Start Num: 7

Candidate Starts for Megatron\_40:

(Start: 6 @36605 has 101 MA's), (Start: 7 @36608 has 248 MA's), (Start: 16 @36671 has 8 MA's), (19, 36686), (Start: 21 @36695 has 15 MA's), (22, 36698), (30, 36734), (48, 36821), (65, 36911),

Gene: Melc17\_40 Start: 36605, Stop: 36916, Start Num: 7

Candidate Starts for Melc17\_40:

(Start: 6 @36602 has 101 MA's), (Start: 7 @36605 has 248 MA's), (Start: 16 @36668 has 8 MA's), (19, 36683), (Start: 21 @36692 has 15 MA's), (30, 36731), (48, 36818),

Gene: MelsMeow\_39 Start: 36213, Stop: 36524, Start Num: 7

Candidate Starts for MelsMeow\_39:

(Start: 6 @36210 has 101 MA's), (Start: 7 @36213 has 248 MA's), (Start: 16 @36276 has 8 MA's), (19, 36291), (Start: 21 @36300 has 15 MA's), (30, 36339), (48, 36426),

Gene: Mesh1\_40 Start: 36619, Stop: 36933, Start Num: 6

Candidate Starts for Mesh1\_40:

(Start: 6 @36619 has 101 MA's), (Start: 7 @36622 has 248 MA's), (Start: 16 @36685 has 8 MA's), (19, 36700), (Start: 21 @36709 has 15 MA's), (22, 36712), (30, 36748), (48, 36835), (65, 36925),

Gene: Mesmerelda\_40 Start: 36320, Stop: 36631, Start Num: 7

Candidate Starts for Mesmerelda\_40:

(Start: 6 @36317 has 101 MA's), (Start: 7 @36320 has 248 MA's), (Start: 16 @36383 has 8 MA's), (19, 36398), (Start: 21 @36407 has 15 MA's), (22, 36410), (30, 36446), (48, 36533), (65, 36623),

Gene: MichaelPhcott\_39 Start: 36209, Stop: 36523, Start Num: 6

Candidate Starts for MichaelPhcott\_39:

(Start: 6 @36209 has 101 MA's), (Start: 7 @36212 has 248 MA's), (Start: 16 @36275 has 8 MA's), (19, 36290), (Start: 21 @36299 has 15 MA's), (22, 36302), (30, 36338), (48, 36425), (65, 36515),

Gene: Mikota\_40 Start: 36595, Stop: 36906, Start Num: 7

Candidate Starts for Mikota\_40:

(Start: 6 @36592 has 101 MA's), (Start: 7 @36595 has 248 MA's), (Start: 16 @36658 has 8 MA's), (19, 36673), (Start: 21 @36682 has 15 MA's), (22, 36685), (30, 36721), (48, 36808), (65, 36898),

Gene: MiniBoss\_40 Start: 36601, Stop: 36912, Start Num: 7

Candidate Starts for MiniBoss\_40:

(Start: 6 @36598 has 101 MA's), (Start: 7 @36601 has 248 MA's), (Start: 16 @36664 has 8 MA's), (19, 36679), (Start: 21 @36688 has 15 MA's), (22, 36691), (30, 36727), (48, 36814), (65, 36904),

Gene: MitKao\_40 Start: 36313, Stop: 36627, Start Num: 6

Candidate Starts for MitKao\_40:

(Start: 6 @36313 has 101 MA's), (Start: 7 @36316 has 248 MA's), (Start: 16 @36379 has 8 MA's), (19, 36394), (Start: 21 @36403 has 15 MA's), (22, 36406), (30, 36442), (48, 36529), (65, 36619),

Gene: Mithril\_37 Start: 36941, Stop: 37252, Start Num: 7

Candidate Starts for Mithril\_37:

(Start: 6 @36938 has 101 MA's), (Start: 7 @36941 has 248 MA's), (Start: 16 @37004 has 8 MA's), (19, 37019), (20, 37025), (Start: 21 @37028 has 15 MA's), (24, 37040), (30, 37067), (38, 37106), (47, 37151), (48, 37154), (57, 37208), (60, 37232),

Gene: MmasiCarm\_40 Start: 37332, Stop: 37568, Start Num: 21

Candidate Starts for MmasiCarm\_40:

(2, 36957), (Start: 21 @37332 has 15 MA's), (49, 37455), (54, 37476), (60, 37536), (63, 37545),

Gene: Morgushi\_40 Start: 36317, Stop: 36628, Start Num: 7

Candidate Starts for Morgushi\_40:

(Start: 6 @36314 has 101 MA's), (Start: 7 @36317 has 248 MA's), (Start: 16 @36380 has 8 MA's), (19, 36395), (Start: 21 @36404 has 15 MA's), (22, 36407), (30, 36443), (48, 36530), (65, 36620),

Gene: Mortcellus\_39 Start: 37897, Stop: 38220, Start Num: 7

Candidate Starts for Mortcellus\_39:

(2, 37609), (Start: 7 @37897 has 248 MA's), (Start: 21 @37984 has 15 MA's), (49, 38107), (54, 38128), (60, 38188), (63, 38197),

Gene: Morty\_40 Start: 36617, Stop: 36928, Start Num: 7

Candidate Starts for Morty\_40:

(Start: 6 @36614 has 101 MA's), (Start: 7 @36617 has 248 MA's), (Start: 16 @36680 has 8 MA's), (19, 36695), (Start: 21 @36704 has 15 MA's), (22, 36707), (30, 36743), (48, 36830), (65, 36920),

Gene: Morty007\_40 Start: 38041, Stop: 38364, Start Num: 7

Candidate Starts for Morty007\_40:

(2, 37753), (Start: 7 @38041 has 248 MA's), (Start: 21 @38128 has 15 MA's), (49, 38251), (54, 38272), (60, 38332), (63, 38341),

Gene: Mosaic\_39 Start: 36319, Stop: 36633, Start Num: 6

Candidate Starts for Mosaic\_39:

(Start: 6 @36319 has 101 MA's), (Start: 7 @36322 has 248 MA's), (Start: 16 @36385 has 8 MA's), (19, 36400), (Start: 21 @36409 has 15 MA's), (22, 36412), (30, 36448), (48, 36535), (65, 36625),

Gene: MossRose\_35 Start: 31642, Stop: 31956, Start Num: 5

Candidate Starts for MossRose\_35:



(Start: 5 @31642 has 18 MA's), (Start: 12 @31702 has 4 MA's), (27, 31774), (28, 31777), (29, 31786), (46, 31858), (57, 31915),

Gene: MrPhizzler\_39 Start: 36325, Stop: 36636, Start Num: 7

Candidate Starts for MrPhizzler\_39:

(Start: 6 @36322 has 101 MA's), (Start: 7 @36325 has 248 MA's), (Start: 16 @36388 has 8 MA's), (19, 36403), (Start: 21 @36412 has 15 MA's), (22, 36415), (30, 36451), (48, 36538), (65, 36628),

Gene: Mudslide\_37 Start: 37173, Stop: 37484, Start Num: 7

Candidate Starts for Mudslide\_37:

(Start: 6 @37170 has 101 MA's), (Start: 7 @37173 has 248 MA's), (Start: 16 @37236 has 8 MA's), (19, 37251), (20, 37257), (Start: 21 @37260 has 15 MA's), (24, 37272), (30, 37299), (38, 37338), (47, 37383), (48, 37386), (57, 37440), (60, 37464),

Gene: Mulan\_39 Start: 36334, Stop: 36645, Start Num: 7

Candidate Starts for Mulan\_39:

(Start: 6 @36331 has 101 MA's), (Start: 7 @36334 has 248 MA's), (Start: 16 @36397 has 8 MA's), (19, 36412), (Start: 21 @36421 has 15 MA's), (22, 36424), (30, 36460), (48, 36547), (65, 36637),

Gene: Murdoc\_40 Start: 36609, Stop: 36920, Start Num: 7

Candidate Starts for Murdoc\_40:

(Start: 6 @36606 has 101 MA's), (Start: 7 @36609 has 248 MA's), (Start: 16 @36672 has 8 MA's), (19, 36687), (Start: 21 @36696 has 15 MA's), (22, 36699), (30, 36735), (48, 36822), (65, 36912),

Gene: Mutante\_39 Start: 36313, Stop: 36627, Start Num: 6

Candidate Starts for Mutante\_39:

(Start: 6 @36313 has 101 MA's), (Start: 7 @36316 has 248 MA's), (Start: 16 @36379 has 8 MA's), (19, 36394), (Start: 21 @36403 has 15 MA's), (22, 36406), (30, 36442), (48, 36529), (65, 36619),

Gene: Mysterious\_41 Start: 37481, Stop: 37801, Start Num: 7

Candidate Starts for Mysterious\_41:

(Start: 6 @37478 has 101 MA's), (Start: 7 @37481 has 248 MA's), (8, 37502), (Start: 16 @37544 has 8 MA's), (18, 37550), (19, 37559), (Start: 21 @37568 has 15 MA's), (23, 37577), (26, 37589), (48, 37694), (60, 37772),

Gene: NHagos\_33 Start: 30199, Stop: 30513, Start Num: 5

Candidate Starts for NHagos\_33:

(Start: 5 @30199 has 18 MA's), (23, 30316), (25, 30325), (28, 30334), (57, 30472),

Gene: Nacho\_0040 Start: 36608, Stop: 36922, Start Num: 6

Candidate Starts for Nacho\_0040:

(Start: 6 @36608 has 101 MA's), (Start: 7 @36611 has 248 MA's), (Start: 16 @36674 has 8 MA's), (19, 36689), (Start: 21 @36698 has 15 MA's), (22, 36701), (30, 36737), (48, 36824), (65, 36914),

Gene: Nanao\_36 Start: 35899, Stop: 36210, Start Num: 7

Candidate Starts for Nanao\_36:

(Start: 6 @35896 has 101 MA's), (Start: 7 @35899 has 248 MA's), (Start: 16 @35962 has 8 MA's), (19, 35977), (20, 35983), (Start: 21 @35986 has 15 MA's), (24, 35998), (30, 36025), (38, 36064), (47, 36109), (48, 36112), (54, 36133), (57, 36166),

Gene: Nangang\_39 Start: 37277, Stop: 37597, Start Num: 7

Candidate Starts for Nangang\_39:

(Start: 6 @37274 has 101 MA's), (Start: 7 @37277 has 248 MA's), (Start: 16 @37340 has 8 MA's), (18, 37346), (19, 37355), (Start: 21 @37364 has 15 MA's), (23, 37373), (25, 37382), (26, 37385), (60, 37568),

Gene: Nathan\_41 Start: 36647, Stop: 36958, Start Num: 7

Candidate Starts for Nathan\_41:

(Start: 6 @36644 has 101 MA's), (Start: 7 @36647 has 248 MA's), (Start: 16 @36710 has 8 MA's), (19, 36725), (Start: 21 @36734 has 15 MA's), (22, 36737), (30, 36773), (48, 36860), (65, 36950),

Gene: Nehemiah\_39 Start: 37481, Stop: 37801, Start Num: 7

Candidate Starts for Nehemiah\_39:

(Start: 6 @37478 has 101 MA's), (Start: 7 @37481 has 248 MA's), (8, 37502), (Start: 16 @37544 has 8 MA's), (18, 37550), (19, 37559), (Start: 21 @37568 has 15 MA's), (23, 37577), (26, 37589), (48, 37694), (60, 37772),

Gene: Neos5\_40 Start: 38056, Stop: 38379, Start Num: 7

Candidate Starts for Neos5\_40:

(2, 37768), (Start: 7 @38056 has 248 MA's), (Start: 21 @38143 has 15 MA's), (49, 38266), (54, 38287), (60, 38347), (63, 38356),

Gene: Newman\_40 Start: 36608, Stop: 36919, Start Num: 7

Candidate Starts for Newman\_40:

(Start: 6 @36605 has 101 MA's), (Start: 7 @36608 has 248 MA's), (Start: 16 @36671 has 8 MA's), (19, 36686), (Start: 21 @36695 has 15 MA's), (22, 36698), (30, 36734), (48, 36821), (65, 36911),

Gene: Nicole21\_40 Start: 36603, Stop: 36917, Start Num: 6

Candidate Starts for Nicole21\_40:

(Start: 6 @36603 has 101 MA's), (Start: 7 @36606 has 248 MA's), (Start: 16 @36669 has 8 MA's), (19, 36684), (Start: 21 @36693 has 15 MA's), (22, 36696), (30, 36732), (48, 36819), (65, 36909),

Gene: Nigel\_35 Start: 35815, Stop: 36126, Start Num: 7

Candidate Starts for Nigel\_35:

(1, 35476), (Start: 6 @35812 has 101 MA's), (Start: 7 @35815 has 248 MA's), (Start: 16 @35878 has 8 MA's), (19, 35893), (20, 35899), (Start: 21 @35902 has 15 MA's), (24, 35914), (30, 35941), (38, 35980), (47, 36025), (48, 36028), (57, 36082), (60, 36106),

Gene: Nozo\_40 Start: 38021, Stop: 38344, Start Num: 7

Candidate Starts for Nozo\_40:

(2, 37733), (Start: 7 @38021 has 248 MA's), (Start: 21 @38108 has 15 MA's), (49, 38231), (54, 38252), (60, 38312), (63, 38321),

Gene: Numberten\_40 Start: 36612, Stop: 36926, Start Num: 6

Candidate Starts for Numberten\_40:

(Start: 6 @36612 has 101 MA's), (Start: 7 @36615 has 248 MA's), (Start: 16 @36678 has 8 MA's), (19, 36693), (Start: 21 @36702 has 15 MA's), (22, 36705), (30, 36741), (48, 36828), (65, 36918),

Gene: Nyala\_39 Start: 36308, Stop: 36619, Start Num: 7

Candidate Starts for Nyala\_39:

(Start: 6 @36305 has 101 MA's), (Start: 7 @36308 has 248 MA's), (Start: 16 @36371 has 8 MA's), (19, 36386), (Start: 21 @36395 has 15 MA's), (22, 36398), (30, 36434), (48, 36521), (65, 36611),

Gene: OSmaximus\_40 Start: 36650, Stop: 36961, Start Num: 7

Candidate Starts for OSmaximus\_40:

(Start: 6 @36647 has 101 MA's), (Start: 7 @36650 has 248 MA's), (Start: 16 @36713 has 8 MA's), (19, 36728), (Start: 21 @36737 has 15 MA's), (22, 36740), (30, 36776), (48, 36863), (65, 36953),

Gene: Obutu\_40 Start: 37245, Stop: 37568, Start Num: 7

Candidate Starts for Obutu\_40:

(2, 36957), (Start: 7 @37245 has 248 MA's), (Start: 21 @37332 has 15 MA's), (49, 37455), (54, 37476), (60, 37536), (63, 37545),

Gene: Olak\_39 Start: 36311, Stop: 36622, Start Num: 7

Candidate Starts for Olak\_39:

(Start: 6 @36308 has 101 MA's), (Start: 7 @36311 has 248 MA's), (Start: 16 @36374 has 8 MA's), (19, 36389), (Start: 21 @36398 has 15 MA's), (22, 36401), (30, 36437), (48, 36524), (65, 36614),

Gene: Oline\_39 Start: 36177, Stop: 36488, Start Num: 7

Candidate Starts for Oline\_39:

(Start: 6 @36174 has 101 MA's), (Start: 7 @36177 has 248 MA's), (Start: 16 @36240 has 8 MA's), (19, 36255), (Start: 21 @36264 has 15 MA's), (30, 36303), (48, 36390),

Gene: Olive\_40 Start: 36595, Stop: 36909, Start Num: 6

Candidate Starts for Olive\_40:

(Start: 6 @36595 has 101 MA's), (Start: 7 @36598 has 248 MA's), (Start: 16 @36661 has 8 MA's), (19, 36676), (Start: 21 @36685 has 15 MA's), (22, 36688), (30, 36724), (48, 36811), (65, 36901),

Gene: OliverWalter\_40 Start: 36620, Stop: 36931, Start Num: 7

Candidate Starts for OliverWalter\_40:

(Start: 6 @36617 has 101 MA's), (Start: 7 @36620 has 248 MA's), (Start: 16 @36683 has 8 MA's), (19, 36698), (Start: 21 @36707 has 15 MA's), (22, 36710), (30, 36746), (48, 36833), (65, 36923),

Gene: Olivio\_39 Start: 37201, Stop: 37437, Start Num: 21

Candidate Starts for Olivio\_39:

(2, 36826), (Start: 21 @37201 has 15 MA's), (49, 37324), (54, 37345), (60, 37405), (63, 37414),

Gene: Omniscient\_40 Start: 36617, Stop: 36928, Start Num: 7

Candidate Starts for Omniscient\_40:

(Start: 6 @36614 has 101 MA's), (Start: 7 @36617 has 248 MA's), (Start: 16 @36680 has 8 MA's), (19, 36695), (Start: 21 @36704 has 15 MA's), (22, 36707), (30, 36743), (48, 36830), (65, 36920),

Gene: Oosterbaan\_40 Start: 36608, Stop: 36919, Start Num: 7

Candidate Starts for Oosterbaan\_40:

(Start: 6 @36605 has 101 MA's), (Start: 7 @36608 has 248 MA's), (Start: 16 @36671 has 8 MA's), (19, 36686), (Start: 21 @36695 has 15 MA's), (22, 36698), (30, 36734), (48, 36821), (65, 36911),

Gene: Opia\_41 Start: 37723, Stop: 38088, Start Num: 4

Candidate Starts for Opia\_41:

(Start: 4 @37723 has 27 MA's), (Start: 6 @37765 has 101 MA's), (Start: 7 @37768 has 248 MA's), (11, 37804), (Start: 16 @37831 has 8 MA's), (19, 37846), (24, 37867), (32, 37906), (56, 38029), (57, 38041), (62, 38071),

Gene: OrangeOswald\_40 Start: 37349, Stop: 37585, Start Num: 21

Candidate Starts for OrangeOswald\_40:

(2, 36974), (Start: 21 @37349 has 15 MA's), (49, 37472), (54, 37493), (60, 37553), (63, 37562),

Gene: Orfeu\_39 Start: 36316, Stop: 36627, Start Num: 7

Candidate Starts for Orfeu\_39:

(Start: 6 @36313 has 101 MA's), (Start: 7 @36316 has 248 MA's), (Start: 16 @36379 has 8 MA's), (19, 36394), (Start: 21 @36403 has 15 MA's), (22, 36406), (30, 36442), (48, 36529), (65, 36619),

Gene: Orion\_40 Start: 36606, Stop: 36917, Start Num: 7

Candidate Starts for Orion\_40:

(Start: 6 @36603 has 101 MA's), (Start: 7 @36606 has 248 MA's), (Start: 16 @36669 has 8 MA's), (19, 36684), (Start: 21 @36693 has 15 MA's), (22, 36696), (30, 36732), (48, 36819), (65, 36909),

Gene: Orwigg\_39 Start: 36304, Stop: 36615, Start Num: 7

Candidate Starts for Orwigg\_39:

(Start: 6 @36301 has 101 MA's), (Start: 7 @36304 has 248 MA's), (Start: 16 @36367 has 8 MA's), (19, 36382), (Start: 21 @36391 has 15 MA's), (22, 36394), (30, 36430), (48, 36517), (65, 36607),

Gene: PG1\_40 Start: 36619, Stop: 36930, Start Num: 7

Candidate Starts for PG1\_40:

(Start: 6 @36616 has 101 MA's), (Start: 7 @36619 has 248 MA's), (Start: 16 @36682 has 8 MA's), (19, 36697), (Start: 21 @36706 has 15 MA's), (22, 36709), (30, 36745), (48, 36832), (65, 36922),

Gene: PR\_35 Start: 36282, Stop: 36566, Start Num: 16

Candidate Starts for PR\_35:

(Start: 16 @36282 has 8 MA's), (26, 36330), (36, 36381), (39, 36396), (40, 36402), (42, 36432), (53, 36465), (57, 36507), (63, 36540),

Gene: Pacifista\_39 Start: 36310, Stop: 36621, Start Num: 7

Candidate Starts for Pacifista\_39:

(Start: 6 @36307 has 101 MA's), (Start: 7 @36310 has 248 MA's), (Start: 16 @36373 has 8 MA's), (19, 36388), (Start: 21 @36397 has 15 MA's), (22, 36400), (30, 36436), (48, 36523), (65, 36613),

Gene: PenguinLover67\_42 Start: 38630, Stop: 38941, Start Num: 7

Candidate Starts for PenguinLover67\_42:

(Start: 6 @38627 has 101 MA's), (Start: 7 @38630 has 248 MA's), (13, 38681), (15, 38690), (Start: 16 @38693 has 8 MA's), (18, 38702), (19, 38711), (47, 38843),

Gene: Phaedrus\_38 Start: 37182, Stop: 37505, Start Num: 7

Candidate Starts for Phaedrus\_38:

(2, 36894), (Start: 7 @37182 has 248 MA's), (Start: 21 @37269 has 15 MA's), (49, 37392), (54, 37413), (60, 37473), (63, 37482),

Gene: Phamished\_40 Start: 36611, Stop: 36925, Start Num: 6

Candidate Starts for Phamished\_40:

(Start: 6 @36611 has 101 MA's), (Start: 7 @36614 has 248 MA's), (Start: 16 @36677 has 8 MA's), (19, 36692), (Start: 21 @36701 has 15 MA's), (22, 36704), (30, 36740), (48, 36827), (65, 36917),

Gene: Phantasmagoria\_41 Start: 37780, Stop: 38100, Start Num: 7

Candidate Starts for Phantasmagoria\_41:

(Start: 4 @37735 has 27 MA's), (Start: 6 @37777 has 101 MA's), (Start: 7 @37780 has 248 MA's), (11, 37816), (Start: 16 @37843 has 8 MA's), (19, 37858), (24, 37879), (32, 37918), (56, 38041), (57, 38053), (62, 38083),

Gene: Phareon\_40 Start: 36318, Stop: 36629, Start Num: 7

Candidate Starts for Phareon\_40:

(Start: 6 @36315 has 101 MA's), (Start: 7 @36318 has 248 MA's), (Start: 16 @36381 has 8 MA's), (19, 36396), (Start: 21 @36405 has 15 MA's), (22, 36408), (30, 36444), (48, 36531), (65, 36621),

Gene: PhatCats2014\_40 Start: 36620, Stop: 36934, Start Num: 6

Candidate Starts for PhatCats2014\_40:

(Start: 6 @36620 has 101 MA's), (Start: 7 @36623 has 248 MA's), (Start: 16 @36686 has 8 MA's), (19, 36701), (Start: 21 @36710 has 15 MA's), (22, 36713), (30, 36749), (48, 36836), (65, 36926),

Gene: PhatLouie\_40 Start: 36612, Stop: 36923, Start Num: 7

Candidate Starts for PhatLouie\_40:

(Start: 6 @36609 has 101 MA's), (Start: 7 @36612 has 248 MA's), (Start: 16 @36675 has 8 MA's), (19, 36690), (Start: 21 @36699 has 15 MA's), (22, 36702), (30, 36738), (48, 36825), (65, 36915),

Gene: Phayeta\_41 Start: 37127, Stop: 37450, Start Num: 7

Candidate Starts for Phayeta\_41:

(2, 36839), (Start: 7 @37127 has 248 MA's), (Start: 21 @37214 has 15 MA's), (49, 37337), (54, 37358), (60, 37418), (63, 37427),

Gene: Phelemich\_39 Start: 37480, Stop: 37800, Start Num: 7

Candidate Starts for Phelemich\_39:

(Start: 6 @37477 has 101 MA's), (Start: 7 @37480 has 248 MA's), (8, 37501), (Start: 16 @37543 has 8 MA's), (18, 37549), (19, 37558), (Start: 21 @37567 has 15 MA's), (23, 37576), (26, 37588), (48, 37693), (60, 37771),

Gene: PhenghisKhan\_39 Start: 36218, Stop: 36529, Start Num: 7

Candidate Starts for PhenghisKhan\_39:

(Start: 6 @36215 has 101 MA's), (Start: 7 @36218 has 248 MA's), (Start: 16 @36281 has 8 MA's), (19, 36296), (Start: 21 @36305 has 15 MA's), (22, 36308), (30, 36344), (48, 36431), (65, 36521),

Gene: Pherdinand\_40 Start: 36614, Stop: 36925, Start Num: 7

Candidate Starts for Pherdinand\_40:

(Start: 6 @36611 has 101 MA's), (Start: 7 @36614 has 248 MA's), (Start: 16 @36677 has 8 MA's), (19, 36692), (Start: 21 @36701 has 15 MA's), (22, 36704), (30, 36740), (48, 36827), (65, 36917),

Gene: Phergie\_39 Start: 36209, Stop: 36520, Start Num: 7

Candidate Starts for Phergie\_39:

(Start: 6 @36206 has 101 MA's), (Start: 7 @36209 has 248 MA's), (Start: 16 @36272 has 8 MA's), (19, 36287), (Start: 21 @36296 has 15 MA's), (22, 36299), (30, 36335), (48, 36422), (65, 36512),

Gene: Philly\_39 Start: 37113, Stop: 37436, Start Num: 7

Candidate Starts for Philly\_39:

(2, 36825), (Start: 7 @37113 has 248 MA's), (Start: 21 @37200 has 15 MA's), (49, 37323), (54, 37344), (60, 37404), (63, 37413),

Gene: Phipps\_40 Start: 36585, Stop: 36896, Start Num: 7

Candidate Starts for Phipps\_40:

(Start: 6 @36582 has 101 MA's), (Start: 7 @36585 has 248 MA's), (Start: 16 @36648 has 8 MA's), (19, 36663), (Start: 21 @36672 has 15 MA's), (22, 36675), (30, 36711), (48, 36798), (65, 36888),

Gene: Phleuron\_39 Start: 36212, Stop: 36526, Start Num: 6

Candidate Starts for Phleuron\_39:

(Start: 6 @36212 has 101 MA's), (Start: 7 @36215 has 248 MA's), (Start: 16 @36278 has 8 MA's), (19, 36293), (Start: 21 @36302 has 15 MA's), (22, 36305), (30, 36341), (48, 36428), (65, 36518),

Gene: Phlyer\_40 Start: 38001, Stop: 38324, Start Num: 7

Candidate Starts for Phlyer\_40:

(2, 37713), (Start: 7 @38001 has 248 MA's), (Start: 21 @38088 has 15 MA's), (49, 38211), (54, 38232), (60, 38292), (63, 38301),

Gene: PhrankReynolds\_39 Start: 36215, Stop: 36526, Start Num: 7

Candidate Starts for PhrankReynolds\_39:

(Start: 6 @36212 has 101 MA's), (Start: 7 @36215 has 248 MA's), (Start: 16 @36278 has 8 MA's), (19, 36293), (Start: 21 @36302 has 15 MA's), (22, 36305), (30, 36341), (48, 36428), (65, 36518),

Gene: PhrodoBaggins\_39 Start: 36602, Stop: 36913, Start Num: 7

Candidate Starts for PhrodoBaggins\_39:

(Start: 6 @36599 has 101 MA's), (Start: 7 @36602 has 248 MA's), (Start: 16 @36665 has 8 MA's), (19, 36680), (Start: 21 @36689 has 15 MA's), (22, 36692), (30, 36728), (48, 36815), (65, 36905),

Gene: Phunky\_40 Start: 36615, Stop: 36926, Start Num: 7

Candidate Starts for Phunky\_40:

(Start: 6 @36612 has 101 MA's), (Start: 7 @36615 has 248 MA's), (Start: 16 @36678 has 8 MA's), (19, 36693), (Start: 21 @36702 has 15 MA's), (22, 36705), (30, 36741), (48, 36828), (65, 36918),

Gene: Piglet\_0039 Start: 36719, Stop: 37033, Start Num: 6

Candidate Starts for Piglet\_0039:

(Start: 6 @36719 has 101 MA's), (Start: 7 @36722 has 248 MA's), (Start: 16 @36785 has 8 MA's), (19, 36800), (Start: 21 @36809 has 15 MA's), (22, 36812), (30, 36848), (48, 36935), (65, 37025),

Gene: PinheadLarry\_40 Start: 36328, Stop: 36639, Start Num: 7

Candidate Starts for PinheadLarry\_40:

(Start: 6 @36325 has 101 MA's), (Start: 7 @36328 has 248 MA's), (Start: 16 @36391 has 8 MA's), (19, 36406), (Start: 21 @36415 has 15 MA's), (30, 36454), (48, 36541),

Gene: Pinkman\_39 Start: 36171, Stop: 36482, Start Num: 7

Candidate Starts for Pinkman\_39:

(Start: 6 @36168 has 101 MA's), (Start: 7 @36171 has 248 MA's), (Start: 16 @36234 has 8 MA's), (19, 36249), (Start: 21 @36258 has 15 MA's), (22, 36261), (30, 36297), (48, 36384),

Gene: Pipsqueak\_40 Start: 36610, Stop: 36924, Start Num: 6

Candidate Starts for Pipsqueak\_40:

(Start: 6 @36610 has 101 MA's), (Start: 7 @36613 has 248 MA's), (Start: 16 @36676 has 8 MA's), (19, 36691), (Start: 21 @36700 has 15 MA's), (22, 36703), (30, 36739), (48, 36826), (65, 36916),

Gene: Placalicious\_39 Start: 36303, Stop: 36617, Start Num: 6

Candidate Starts for Placalicious\_39:

(Start: 6 @36303 has 101 MA's), (Start: 7 @36306 has 248 MA's), (Start: 16 @36369 has 8 MA's), (19, 36384), (Start: 21 @36393 has 15 MA's), (22, 36396), (30, 36432), (48, 36519), (65, 36609),

Gene: Plata\_40 Start: 36327, Stop: 36638, Start Num: 7

Candidate Starts for Plata\_40:

(Start: 6 @36324 has 101 MA's), (Start: 7 @36327 has 248 MA's), (Start: 16 @36390 has 8 MA's), (19, 36405), (Start: 21 @36414 has 15 MA's), (30, 36453), (48, 36540),

Gene: Plmatters\_40 Start: 36609, Stop: 36923, Start Num: 6

Candidate Starts for Plmatters\_40:

(Start: 6 @36609 has 101 MA's), (Start: 7 @36612 has 248 MA's), (Start: 16 @36675 has 8 MA's), (19, 36690), (Start: 21 @36699 has 15 MA's), (22, 36702), (30, 36738), (48, 36825), (65, 36915),

Gene: Podrick\_40 Start: 36603, Stop: 36914, Start Num: 7

Candidate Starts for Podrick\_40:

(Start: 6 @36600 has 101 MA's), (Start: 7 @36603 has 248 MA's), (Start: 16 @36666 has 8 MA's), (19, 36681), (Start: 21 @36690 has 15 MA's), (22, 36693), (30, 36729), (48, 36816), (65, 36906),

Gene: Pops\_40 Start: 36627, Stop: 36938, Start Num: 7

Candidate Starts for Pops\_40:

(Start: 6 @36624 has 101 MA's), (Start: 7 @36627 has 248 MA's), (Start: 16 @36690 has 8 MA's), (19, 36705), (Start: 21 @36714 has 15 MA's), (22, 36717), (30, 36753), (48, 36840), (65, 36930),

Gene: Poster\_36 Start: 35900, Stop: 36211, Start Num: 7

Candidate Starts for Poster\_36:

(Start: 6 @35897 has 101 MA's), (Start: 7 @35900 has 248 MA's), (Start: 16 @35963 has 8 MA's), (19, 35978), (20, 35984), (Start: 21 @35987 has 15 MA's), (24, 35999), (30, 36026), (38, 36065), (47, 36110), (48, 36113), (54, 36134), (57, 36167),

Gene: Potter\_39 Start: 36327, Stop: 36638, Start Num: 7

Candidate Starts for Potter\_39:

(Start: 6 @36324 has 101 MA's), (Start: 7 @36327 has 248 MA's), (Start: 16 @36390 has 8 MA's), (19, 36405), (Start: 21 @36414 has 15 MA's), (22, 36417), (30, 36453), (48, 36540), (65, 36630),

Gene: Prickles\_40 Start: 36603, Stop: 36914, Start Num: 7

Candidate Starts for Prickles\_40:

(Start: 6 @36600 has 101 MA's), (Start: 7 @36603 has 248 MA's), (Start: 16 @36666 has 8 MA's), (19, 36681), (Start: 21 @36690 has 15 MA's), (22, 36693), (30, 36729), (48, 36816), (65, 36906),

Gene: Prince\_37 Start: 37083, Stop: 37394, Start Num: 7

Candidate Starts for Prince\_37:

(Start: 6 @37080 has 101 MA's), (Start: 7 @37083 has 248 MA's), (Start: 16 @37146 has 8 MA's), (19, 37161), (20, 37167), (Start: 21 @37170 has 15 MA's), (24, 37182), (30, 37209), (38, 37248), (47, 37293), (48, 37296), (57, 37350), (60, 37374),

Gene: PrinceCharming\_41 Start: 37842, Stop: 38207, Start Num: 4

Candidate Starts for PrinceCharming\_41:

(Start: 4 @37842 has 27 MA's), (Start: 6 @37884 has 101 MA's), (Start: 7 @37887 has 248 MA's), (11, 37923), (Start: 16 @37950 has 8 MA's), (19, 37965), (24, 37986), (32, 38025), (56, 38148), (57, 38160), (62, 38190),

Gene: ProfessorX\_40 Start: 36598, Stop: 36909, Start Num: 7

Candidate Starts for ProfessorX\_40:

(Start: 6 @36595 has 101 MA's), (Start: 7 @36598 has 248 MA's), (Start: 16 @36661 has 8 MA's), (19, 36676), (Start: 21 @36685 has 15 MA's), (22, 36688), (30, 36724), (48, 36811), (65, 36901),

Gene: Puhltonio\_40 Start: 36619, Stop: 36930, Start Num: 7

Candidate Starts for Puhltonio\_40:

(Start: 6 @36616 has 101 MA's), (Start: 7 @36619 has 248 MA's), (Start: 16 @36682 has 8 MA's), (19, 36697), (Start: 21 @36706 has 15 MA's), (22, 36709), (30, 36745), (48, 36832), (65, 36922),

Gene: QueenBeane\_40 Start: 36606, Stop: 36920, Start Num: 6

Candidate Starts for QueenBeane\_40:

(Start: 6 @36606 has 101 MA's), (Start: 7 @36609 has 248 MA's), (Start: 16 @36672 has 8 MA's), (19, 36687), (Start: 21 @36696 has 15 MA's), (22, 36699), (30, 36735), (48, 36822), (65, 36912),

Gene: QueenPie\_36 Start: 37024, Stop: 37335, Start Num: 7

Candidate Starts for QueenPie\_36:

(Start: 6 @37021 has 101 MA's), (Start: 7 @37024 has 248 MA's), (Start: 16 @37087 has 8 MA's), (19, 37102), (20, 37108), (24, 37123), (30, 37150), (38, 37189), (47, 37234), (48, 37237), (54, 37258), (57, 37291), (60, 37315),

Gene: Quesadilla\_42 Start: 38636, Stop: 38953, Start Num: 6

Candidate Starts for Quesadilla\_42:

(Start: 6 @38636 has 101 MA's), (Start: 7 @38639 has 248 MA's), (15, 38699), (Start: 16 @38702 has 8 MA's), (18, 38711), (19, 38720), (43, 38843), (47, 38852),

Gene: Quisquilliae\_40 Start: 36637, Stop: 36948, Start Num: 7

Candidate Starts for Quisquilliae\_40:

(Start: 6 @36634 has 101 MA's), (Start: 7 @36637 has 248 MA's), (Start: 16 @36700 has 8 MA's), (19, 36715), (Start: 21 @36724 has 15 MA's), (22, 36727), (30, 36763), (48, 36850), (65, 36940),

Gene: Qyrzula\_38 Start: 37881, Stop: 38246, Start Num: 4

Candidate Starts for Qyrzula\_38:

(Start: 4 @37881 has 27 MA's), (Start: 6 @37923 has 101 MA's), (Start: 7 @37926 has 248 MA's), (11, 37962), (Start: 16 @37989 has 8 MA's), (19, 38004), (24, 38025), (32, 38064), (56, 38187), (57, 38199), (62, 38229),

Gene: RagingRooster\_40 Start: 37263, Stop: 37586, Start Num: 7

Candidate Starts for RagingRooster\_40:

(2, 36975), (Start: 7 @37263 has 248 MA's), (Start: 21 @37350 has 15 MA's), (49, 37473), (54, 37494), (60, 37554), (63, 37563),

Gene: RawrgerThat\_37 Start: 36928, Stop: 37239, Start Num: 7

Candidate Starts for RawrgerThat\_37:

(Start: 6 @36925 has 101 MA's), (Start: 7 @36928 has 248 MA's), (Start: 16 @36991 has 8 MA's), (19, 37006), (20, 37012), (Start: 21 @37015 has 15 MA's), (24, 37027), (30, 37054), (38, 37093), (47, 37138), (48, 37141), (57, 37195), (60, 37219),

Gene: RedMaple\_39 Start: 36616, Stop: 36927, Start Num: 7

Candidate Starts for RedMaple\_39:

(Start: 6 @36613 has 101 MA's), (Start: 7 @36616 has 248 MA's), (Start: 16 @36679 has 8 MA's), (19, 36694), (Start: 21 @36703 has 15 MA's), (22, 36706), (30, 36742), (48, 36829), (65, 36919),

Gene: Reprobate\_39 Start: 37482, Stop: 37805, Start Num: 6

Candidate Starts for Reprobate\_39:

(Start: 6 @37482 has 101 MA's), (Start: 7 @37485 has 248 MA's), (8, 37506), (Start: 16 @37548 has 8 MA's), (18, 37554), (19, 37563), (Start: 21 @37572 has 15 MA's), (23, 37581), (26, 37593), (48, 37698), (60, 37776),

Gene: Rhinoforte\_41 Start: 37844, Stop: 38209, Start Num: 4

Candidate Starts for Rhinoforte\_41:

(Start: 4 @37844 has 27 MA's), (Start: 6 @37886 has 101 MA's), (Start: 7 @37889 has 248 MA's), (11, 37925), (Start: 16 @37952 has 8 MA's), (19, 37967), (24, 37988), (32, 38027), (56, 38150), (57, 38162), (62, 38192),



Gene: Rich\_38 Start: 37097, Stop: 37417, Start Num: 7

Candidate Starts for Rich\_38:

(Start: 6 @37094 has 101 MA's), (Start: 7 @37097 has 248 MA's), (Start: 16 @37160 has 8 MA's), (18, 37166), (19, 37175), (Start: 21 @37184 has 15 MA's), (23, 37193), (26, 37205), (60, 37388),

Gene: Ricotta\_39 Start: 36335, Stop: 36646, Start Num: 7

Candidate Starts for Ricotta\_39:

(Start: 6 @36332 has 101 MA's), (Start: 7 @36335 has 248 MA's), (Start: 16 @36398 has 8 MA's), (19, 36413), (Start: 21 @36422 has 15 MA's), (22, 36425), (30, 36461), (48, 36548), (65, 36638),

Gene: Riggan\_40 Start: 36593, Stop: 36907, Start Num: 6

Candidate Starts for Riggan\_40:

(Start: 6 @36593 has 101 MA's), (Start: 7 @36596 has 248 MA's), (Start: 16 @36659 has 8 MA's), (19, 36674), (Start: 21 @36683 has 15 MA's), (22, 36686), (30, 36722), (48, 36809), (65, 36899),

Gene: Rimu\_41 Start: 36342, Stop: 36656, Start Num: 6

Candidate Starts for Rimu\_41:

(Start: 6 @36342 has 101 MA's), (Start: 7 @36345 has 248 MA's), (Start: 16 @36408 has 8 MA's), (19, 36423), (Start: 21 @36432 has 15 MA's), (22, 36435), (30, 36471), (48, 36558), (65, 36648),

Gene: Rinkes\_41 Start: 38207, Stop: 38515, Start Num: 7

Candidate Starts for Rinkes\_41:

(Start: 7 @38207 has 248 MA's), (11, 38243), (Start: 16 @38270 has 8 MA's), (18, 38276), (19, 38285), (Start: 21 @38294 has 15 MA's), (26, 38315), (52, 38435), (57, 38471),

Gene: Rita130\_39 Start: 37203, Stop: 37523, Start Num: 7

Candidate Starts for Rita130\_39:

(Start: 6 @37200 has 101 MA's), (Start: 7 @37203 has 248 MA's), (Start: 16 @37266 has 8 MA's), (18, 37272), (19, 37281), (Start: 21 @37290 has 15 MA's), (23, 37299), (26, 37311), (60, 37494),

Gene: Rita1961\_40 Start: 37333, Stop: 37569, Start Num: 21

Candidate Starts for Rita1961\_40:

(2, 36958), (Start: 21 @37333 has 15 MA's), (49, 37456), (54, 37477), (60, 37537), (63, 37546),

Gene: Riverton\_39 Start: 36614, Stop: 36928, Start Num: 6

Candidate Starts for Riverton\_39:

(Start: 6 @36614 has 101 MA's), (Start: 7 @36617 has 248 MA's), (Start: 16 @36680 has 8 MA's), (19, 36695), (Start: 21 @36704 has 15 MA's), (22, 36707), (30, 36743), (48, 36830), (65, 36920),

Gene: Robyn\_39 Start: 36180, Stop: 36491, Start Num: 7

Candidate Starts for Robyn\_39:

(Start: 6 @36177 has 101 MA's), (Start: 7 @36180 has 248 MA's), (Start: 16 @36243 has 8 MA's), (19, 36258), (Start: 21 @36267 has 15 MA's), (22, 36270), (30, 36306), (48, 36393), (65, 36483),

Gene: Roliet\_40 Start: 36602, Stop: 36916, Start Num: 6

Candidate Starts for Roliet\_40:

(Start: 6 @36602 has 101 MA's), (Start: 7 @36605 has 248 MA's), (Start: 16 @36668 has 8 MA's), (19, 36683), (Start: 21 @36692 has 15 MA's), (22, 36695), (30, 36731), (48, 36818), (65, 36908),

Gene: RomaT\_40 Start: 38123, Stop: 38359, Start Num: 21

Candidate Starts for RomaT\_40:

(2, 37748), (Start: 21 @38123 has 15 MA's), (49, 38246), (54, 38267), (60, 38327), (63, 38336),

Gene: Roscoe\_41 Start: 36840, Stop: 37154, Start Num: 6

Candidate Starts for Roscoe\_41:

(Start: 6 @36840 has 101 MA's), (Start: 7 @36843 has 248 MA's), (Start: 16 @36906 has 8 MA's), (19, 36921), (Start: 21 @36930 has 15 MA's), (22, 36933), (30, 36969), (48, 37056), (65, 37146),

Gene: Rosebush\_40 Start: 37851, Stop: 38216, Start Num: 4

Candidate Starts for Rosebush\_40:

(Start: 4 @37851 has 27 MA's), (Start: 6 @37893 has 101 MA's), (Start: 7 @37896 has 248 MA's), (11, 37932), (Start: 16 @37959 has 8 MA's), (19, 37974), (24, 37995), (32, 38034), (56, 38157), (57, 38169), (62, 38199),

Gene: Roy17\_40 Start: 36306, Stop: 36620, Start Num: 6

Candidate Starts for Roy17\_40:

(Start: 6 @36306 has 101 MA's), (Start: 7 @36309 has 248 MA's), (Start: 16 @36372 has 8 MA's), (19, 36387), (Start: 21 @36396 has 15 MA's), (22, 36399), (30, 36435), (48, 36522), (65, 36612),

Gene: SDcharge11\_40 Start: 36583, Stop: 36894, Start Num: 7

Candidate Starts for SDcharge11\_40:

(Start: 6 @36580 has 101 MA's), (Start: 7 @36583 has 248 MA's), (Start: 16 @36646 has 8 MA's), (19, 36661), (Start: 21 @36670 has 15 MA's), (22, 36673), (30, 36709), (48, 36796), (65, 36886),

Gene: Sabella\_40 Start: 37728, Stop: 38093, Start Num: 4

Candidate Starts for Sabella\_40:

(Start: 4 @37728 has 27 MA's), (Start: 6 @37770 has 101 MA's), (Start: 7 @37773 has 248 MA's), (11, 37809), (Start: 16 @37836 has 8 MA's), (19, 37851), (24, 37872), (32, 37911), (56, 38034), (57, 38046), (62, 38076),

Gene: Saguaro\_41 Start: 38281, Stop: 38601, Start Num: 7

Candidate Starts for Saguaro\_41:

(Start: 7 @38281 has 248 MA's), (Start: 16 @38344 has 8 MA's), (18, 38353), (19, 38362), (Start: 21 @38371 has 15 MA's), (34, 38431), (54, 38518),

Gene: Samaymay\_40 Start: 36609, Stop: 36920, Start Num: 7

Candidate Starts for Samaymay\_40:

(Start: 6 @36606 has 101 MA's), (Start: 7 @36609 has 248 MA's), (Start: 16 @36672 has 8 MA's), (19, 36687), (Start: 21 @36696 has 15 MA's), (22, 36699), (30, 36735), (48, 36822), (65, 36912),

Gene: SassyCat97\_39 Start: 36312, Stop: 36626, Start Num: 6

Candidate Starts for SassyCat97\_39:

(Start: 6 @36312 has 101 MA's), (Start: 7 @36315 has 248 MA's), (Start: 16 @36378 has 8 MA's), (19, 36393), (Start: 21 @36402 has 15 MA's), (22, 36405), (30, 36441), (48, 36528), (65, 36618),

Gene: Schadenfreude\_39 Start: 36166, Stop: 36477, Start Num: 7

Candidate Starts for Schadenfreude\_39:

(Start: 6 @36163 has 101 MA's), (Start: 7 @36166 has 248 MA's), (Start: 16 @36229 has 8 MA's), (19, 36244), (Start: 21 @36253 has 15 MA's), (22, 36256), (30, 36292), (48, 36379), (65, 36469),

Gene: Schueller\_39 Start: 36331, Stop: 36642, Start Num: 7

Candidate Starts for Schueller\_39:

(Start: 6 @36328 has 101 MA's), (Start: 7 @36331 has 248 MA's), (Start: 16 @36394 has 8 MA's), (19, 36409), (Start: 21 @36418 has 15 MA's), (30, 36457), (48, 36544), (65, 36634),

Gene: Scoot17C\_40 Start: 36608, Stop: 36919, Start Num: 7

Candidate Starts for Scoot17C\_40:

(Start: 6 @36605 has 101 MA's), (Start: 7 @36608 has 248 MA's), (Start: 16 @36671 has 8 MA's), (19, 36686), (Start: 21 @36695 has 15 MA's), (22, 36698), (30, 36734), (48, 36821), (65, 36911),

Gene: Scrick\_40 Start: 36333, Stop: 36644, Start Num: 7

Candidate Starts for Scrick\_40:

(Start: 6 @36330 has 101 MA's), (Start: 7 @36333 has 248 MA's), (Start: 16 @36396 has 8 MA's), (19, 36411), (Start: 21 @36420 has 15 MA's), (22, 36423), (30, 36459), (48, 36546), (65, 36636),

Gene: Selr12\_40 Start: 36336, Stop: 36647, Start Num: 7

Candidate Starts for Selr12\_40:

(Start: 6 @36333 has 101 MA's), (Start: 7 @36336 has 248 MA's), (Start: 16 @36399 has 8 MA's), (19, 36414), (Start: 21 @36423 has 15 MA's), (22, 36426), (30, 36462), (48, 36549), (65, 36639),

Gene: Serendipitous\_38 Start: 37048, Stop: 37368, Start Num: 7

Candidate Starts for Serendipitous\_38:

(Start: 6 @37045 has 101 MA's), (Start: 7 @37048 has 248 MA's), (Start: 16 @37111 has 8 MA's), (18, 37117), (19, 37126), (Start: 21 @37135 has 15 MA's), (23, 37144), (25, 37153), (26, 37156), (60, 37339),

Gene: Serendipity\_40 Start: 36633, Stop: 36944, Start Num: 7

Candidate Starts for Serendipity\_40:

(Start: 6 @36630 has 101 MA's), (Start: 7 @36633 has 248 MA's), (Start: 16 @36696 has 8 MA's), (19, 36711), (Start: 21 @36720 has 15 MA's), (22, 36723), (30, 36759), (48, 36846), (65, 36936),

Gene: Serpentine\_0040 Start: 36611, Stop: 36925, Start Num: 6

Candidate Starts for Serpentine\_0040:

(Start: 6 @36611 has 101 MA's), (Start: 7 @36614 has 248 MA's), (Start: 16 @36677 has 8 MA's), (19, 36692), (Start: 21 @36701 has 15 MA's), (22, 36704), (30, 36740), (48, 36827), (65, 36917),

Gene: Shatter\_33 Start: 29709, Stop: 30020, Start Num: 5

Candidate Starts for Shatter\_33:

(Start: 5 @29709 has 18 MA's), (11, 29763), (27, 29841), (28, 29844), (57, 29979),

Gene: Sheila\_40 Start: 36651, Stop: 36962, Start Num: 7

Candidate Starts for Sheila\_40:

(Start: 6 @36648 has 101 MA's), (Start: 7 @36651 has 248 MA's), (Start: 16 @36714 has 8 MA's), (19, 36729), (Start: 21 @36738 has 15 MA's), (22, 36741), (30, 36777), (48, 36864), (65, 36954),

Gene: Shenandoah\_40 Start: 37235, Stop: 37558, Start Num: 7

Candidate Starts for Shenandoah\_40:

(2, 36947), (Start: 7 @37235 has 248 MA's), (Start: 21 @37322 has 15 MA's), (49, 37445), (54, 37466), (60, 37526), (63, 37535),

Gene: Shenyu\_39 Start: 37277, Stop: 37597, Start Num: 7

Candidate Starts for Shenyu\_39:

(Start: 6 @37274 has 101 MA's), (Start: 7 @37277 has 248 MA's), (Start: 16 @37340 has 8 MA's), (18, 37346), (19, 37355), (Start: 21 @37364 has 15 MA's), (23, 37373), (25, 37382), (26, 37385), (60, 37568),

Gene: ShiVal\_40 Start: 36604, Stop: 36918, Start Num: 6

Candidate Starts for ShiVal\_40:

(Start: 6 @36604 has 101 MA's), (Start: 7 @36607 has 248 MA's), (Start: 16 @36670 has 8 MA's), (19, 36685), (Start: 21 @36694 has 15 MA's), (22, 36697), (30, 36733), (48, 36820), (65, 36910),

Gene: Sigman\_40 Start: 36596, Stop: 36910, Start Num: 6

Candidate Starts for Sigman\_40:

(Start: 6 @36596 has 101 MA's), (Start: 7 @36599 has 248 MA's), (Start: 16 @36662 has 8 MA's), (19, 36677), (Start: 21 @36686 has 15 MA's), (22, 36689), (30, 36725), (48, 36812), (65, 36902),

Gene: SilverBell\_40 Start: 36629, Stop: 36940, Start Num: 7

Candidate Starts for SilverBell\_40:

(Start: 6 @36626 has 101 MA's), (Start: 7 @36629 has 248 MA's), (Start: 16 @36692 has 8 MA's), (19, 36707), (Start: 21 @36716 has 15 MA's), (22, 36719), (30, 36755), (48, 36842), (65, 36932),

Gene: Simielle\_39 Start: 36302, Stop: 36613, Start Num: 7

Candidate Starts for Simielle\_39:

(Start: 6 @36299 has 101 MA's), (Start: 7 @36302 has 248 MA's), (Start: 16 @36365 has 8 MA's), (19, 36380), (Start: 21 @36389 has 15 MA's), (22, 36392), (30, 36428), (48, 36515), (65, 36605),

Gene: SirBeauregard\_40 Start: 36306, Stop: 36617, Start Num: 7

Candidate Starts for SirBeauregard\_40:

(Start: 6 @36303 has 101 MA's), (Start: 7 @36306 has 248 MA's), (Start: 16 @36369 has 8 MA's), (19, 36384), (Start: 21 @36393 has 15 MA's), (22, 36396), (30, 36432), (48, 36519), (65, 36609),

Gene: SirJeffery\_39 Start: 37202, Stop: 37522, Start Num: 7

Candidate Starts for SirJeffery\_39:

(Start: 6 @37199 has 101 MA's), (Start: 7 @37202 has 248 MA's), (Start: 16 @37265 has 8 MA's), (18, 37271), (19, 37280), (Start: 21 @37289 has 15 MA's), (23, 37298), (26, 37310), (60, 37493),

Gene: Sisko\_33 Start: 30560, Stop: 30871, Start Num: 5

Candidate Starts for Sisko\_33:

(3, 30353), (Start: 5 @30560 has 18 MA's), (27, 30692), (28, 30695), (57, 30830),

Gene: Skippy\_40 Start: 36597, Stop: 36908, Start Num: 7

Candidate Starts for Skippy\_40:

(Start: 6 @36594 has 101 MA's), (Start: 7 @36597 has 248 MA's), (Start: 16 @36660 has 8 MA's), (19, 36675), (Start: 21 @36684 has 15 MA's), (22, 36687), (30, 36723), (48, 36810), (65, 36900),

Gene: Slatt\_40 Start: 36623, Stop: 36934, Start Num: 7

Candidate Starts for Slatt\_40:

(Start: 6 @36620 has 101 MA's), (Start: 7 @36623 has 248 MA's), (Start: 16 @36686 has 8 MA's), (19, 36701), (Start: 21 @36710 has 15 MA's), (22, 36713), (30, 36749), (48, 36836), (65, 36926),

Gene: SlippinJimmy\_40 Start: 38028, Stop: 38351, Start Num: 7

Candidate Starts for SlippinJimmy\_40:

(2, 37740), (Start: 7 @38028 has 248 MA's), (Start: 21 @38115 has 15 MA's), (49, 38238), (54, 38259), (60, 38319), (63, 38328),

Gene: Soile\_40 Start: 36329, Stop: 36640, Start Num: 7

Candidate Starts for Soile\_40:

(Start: 6 @36326 has 101 MA's), (Start: 7 @36329 has 248 MA's), (Start: 16 @36392 has 8 MA's), (19, 36407), (Start: 21 @36416 has 15 MA's), (30, 36455), (48, 36542), (65, 36632),

Gene: Solosis\_39 Start: 36324, Stop: 36635, Start Num: 7

Candidate Starts for Solosis\_39:

(Start: 6 @36321 has 101 MA's), (Start: 7 @36324 has 248 MA's), (Start: 16 @36387 has 8 MA's), (19, 36402), (Start: 21 @36411 has 15 MA's), (22, 36414), (30, 36450), (48, 36537), (65, 36627),

Gene: Soos\_51 Start: 29927, Stop: 30148, Start Num: 12

Candidate Starts for Soos\_51:

(Start: 12 @29927 has 4 MA's), (Start: 21 @29975 has 15 MA's), (25, 29993), (26, 29996), (33, 30011), (55, 30089), (58, 30119), (60, 30140),

Gene: Sophia\_39 Start: 36321, Stop: 36635, Start Num: 6

Candidate Starts for Sophia\_39:

(Start: 6 @36321 has 101 MA's), (Start: 7 @36324 has 248 MA's), (Start: 16 @36387 has 8 MA's), (19, 36402), (Start: 21 @36411 has 15 MA's), (22, 36414), (30, 36450), (48, 36537), (65, 36627),

Gene: Soto\_40 Start: 36617, Stop: 36928, Start Num: 7

Candidate Starts for Soto\_40:

(Start: 6 @36614 has 101 MA's), (Start: 7 @36617 has 248 MA's), (Start: 16 @36680 has 8 MA's), (19, 36695), (Start: 21 @36704 has 15 MA's), (22, 36707), (30, 36743), (48, 36830), (65, 36920),

Gene: Sour\_38 Start: 34439, Stop: 34750, Start Num: 5

Candidate Starts for Sour\_38:

(Start: 4 @34412 has 27 MA's), (Start: 5 @34439 has 18 MA's), (27, 34571), (28, 34574), (57, 34709), (61, 34736),

Gene: Spartan300\_40 Start: 36600, Stop: 36914, Start Num: 6

Candidate Starts for Spartan300\_40:

(Start: 6 @36600 has 101 MA's), (Start: 7 @36603 has 248 MA's), (Start: 16 @36666 has 8 MA's), (19, 36681), (Start: 21 @36690 has 15 MA's), (22, 36693), (30, 36729), (48, 36816), (65, 36906),

Gene: Squid\_40 Start: 36312, Stop: 36626, Start Num: 6

Candidate Starts for Squid\_40:

(Start: 6 @36312 has 101 MA's), (Start: 7 @36315 has 248 MA's), (Start: 16 @36378 has 8 MA's), (19, 36393), (Start: 21 @36402 has 15 MA's), (22, 36405), (30, 36441), (48, 36528), (65, 36618),

Gene: Squiggle\_40 Start: 36327, Stop: 36638, Start Num: 7

Candidate Starts for Squiggle\_40:

(Start: 6 @36324 has 101 MA's), (Start: 7 @36327 has 248 MA's), (Start: 16 @36390 has 8 MA's), (19, 36405), (Start: 21 @36414 has 15 MA's), (22, 36417), (30, 36453), (48, 36540), (65, 36630),

Gene: Sting\_54 Start: 30366, Stop: 30587, Start Num: 12

Candidate Starts for Sting\_54:

(Start: 12 @30366 has 4 MA's), (Start: 21 @30414 has 15 MA's), (25, 30432), (26, 30435), (33, 30450), (55, 30528), (58, 30558), (60, 30579),

Gene: Stinger\_35 Start: 35502, Stop: 35816, Start Num: 6

Candidate Starts for Stinger\_35:

(1, 35166), (Start: 6 @35502 has 101 MA's), (Start: 7 @35505 has 248 MA's), (15, 35565), (Start: 16 @35568 has 8 MA's), (19, 35583), (20, 35589), (Start: 21 @35592 has 15 MA's), (24, 35604), (30, 35631), (38, 35670), (47, 35715), (48, 35718), (57, 35772), (60, 35796),

Gene: StinkyVeggy\_41 Start: 37354, Stop: 37674, Start Num: 7

Candidate Starts for StinkyVeggy\_41:

(Start: 6 @37351 has 101 MA's), (Start: 7 @37354 has 248 MA's), (Start: 16 @37417 has 8 MA's), (18, 37423), (19, 37432), (Start: 21 @37441 has 15 MA's), (23, 37450), (25, 37459), (26, 37462), (60, 37645),

Gene: Struggle\_39 Start: 36165, Stop: 36476, Start Num: 7

Candidate Starts for Struggle\_39:

(Start: 6 @36162 has 101 MA's), (Start: 7 @36165 has 248 MA's), (Start: 16 @36228 has 8 MA's), (19, 36243), (Start: 21 @36252 has 15 MA's), (30, 36291), (48, 36378),

Gene: Suffolk\_40 Start: 36614, Stop: 36925, Start Num: 7

Candidate Starts for Suffolk\_40:

(Start: 6 @36611 has 101 MA's), (Start: 7 @36614 has 248 MA's), (Start: 16 @36677 has 8 MA's), (19, 36692), (Start: 21 @36701 has 15 MA's), (22, 36704), (30, 36740), (48, 36827), (65, 36917),

Gene: Suigeneris\_39 Start: 37205, Stop: 37525, Start Num: 7

Candidate Starts for Suigeneris\_39:

(Start: 6 @37202 has 101 MA's), (Start: 7 @37205 has 248 MA's), (Start: 16 @37268 has 8 MA's), (18, 37274), (19, 37283), (Start: 21 @37292 has 15 MA's), (23, 37301), (26, 37313), (60, 37496),

Gene: Surely\_40 Start: 36614, Stop: 36928, Start Num: 6

Candidate Starts for Surely\_40:

(Start: 6 @36614 has 101 MA's), (Start: 7 @36617 has 248 MA's), (Start: 16 @36680 has 8 MA's), (19, 36695), (Start: 21 @36704 has 15 MA's), (22, 36707), (30, 36743), (48, 36830), (65, 36920),

Gene: SwainyDoc\_40 Start: 37257, Stop: 37580, Start Num: 7

Candidate Starts for SwainyDoc\_40:

(2, 36969), (Start: 7 @37257 has 248 MA's), (Start: 21 @37344 has 15 MA's), (49, 37467), (54, 37488), (60, 37548), (63, 37557),

Gene: Swiphy\_41 Start: 36612, Stop: 36923, Start Num: 7

Candidate Starts for Swiphy\_41:

(Start: 6 @36609 has 101 MA's), (Start: 7 @36612 has 248 MA's), (Start: 16 @36675 has 8 MA's), (19, 36690), (Start: 21 @36699 has 15 MA's), (22, 36702), (30, 36738), (48, 36825), (65, 36915),

Gene: Swish\_40 Start: 36597, Stop: 36911, Start Num: 6

Candidate Starts for Swish\_40:

(Start: 6 @36597 has 101 MA's), (Start: 7 @36600 has 248 MA's), (Start: 16 @36663 has 8 MA's), (19, 36678), (Start: 21 @36687 has 15 MA's), (22, 36690), (30, 36726), (48, 36813), (65, 36903),

Gene: SynergyX\_40 Start: 37263, Stop: 37586, Start Num: 7

Candidate Starts for SynergyX\_40:

(2, 36975), (Start: 7 @37263 has 248 MA's), (Start: 21 @37350 has 15 MA's), (49, 37473), (54, 37494), (60, 37554), (63, 37563),

Gene: TA17A\_42 Start: 37718, Stop: 38083, Start Num: 4

Candidate Starts for TA17A\_42:

(Start: 4 @37718 has 27 MA's), (Start: 6 @37760 has 101 MA's), (Start: 7 @37763 has 248 MA's), (11, 37799), (Start: 16 @37826 has 8 MA's), (19, 37841), (24, 37862), (32, 37901), (56, 38024), (57, 38036), (62, 38066),

Gene: TallGrassMM\_40 Start: 36239, Stop: 36550, Start Num: 7

Candidate Starts for TallGrassMM\_40:

(Start: 6 @36236 has 101 MA's), (Start: 7 @36239 has 248 MA's), (Start: 16 @36302 has 8 MA's), (19, 36317), (Start: 21 @36326 has 15 MA's), (22, 36329), (30, 36365), (48, 36452), (65, 36542),

Gene: Taptic\_35 Start: 35678, Stop: 35962, Start Num: 16

Candidate Starts for Taptic\_35:

(Start: 16 @35678 has 8 MA's), (26, 35726), (36, 35777), (39, 35792), (40, 35798), (42, 35828), (53, 35861), (57, 35903), (63, 35936),

Gene: Telesworld\_39 Start: 36309, Stop: 36623, Start Num: 6

Candidate Starts for Telesworld\_39:

(Start: 6 @36309 has 101 MA's), (Start: 7 @36312 has 248 MA's), (Start: 16 @36375 has 8 MA's), (19, 36390), (Start: 21 @36399 has 15 MA's), (22, 36402), (30, 36438), (48, 36525), (65, 36615),

Gene: Thonko\_39 Start: 34628, Stop: 34939, Start Num: 7

Candidate Starts for Thonko\_39:

(Start: 7 @34628 has 248 MA's), (Start: 9 @34652 has 1 MA's), (11, 34664), (14, 34685), (Start: 16 @34691 has 8 MA's), (18, 34697), (19, 34706),

Gene: Thora\_40 Start: 36616, Stop: 36927, Start Num: 7

Candidate Starts for Thora\_40:

(Start: 6 @36613 has 101 MA's), (Start: 7 @36616 has 248 MA's), (Start: 16 @36679 has 8 MA's), (19, 36694), (Start: 21 @36703 has 15 MA's), (22, 36706), (30, 36742), (48, 36829), (65, 36919),

Gene: ThreeOh3D2\_40 Start: 36611, Stop: 36925, Start Num: 6

Candidate Starts for ThreeOh3D2\_40:

(Start: 6 @36611 has 101 MA's), (Start: 7 @36614 has 248 MA's), (Start: 16 @36677 has 8 MA's), (19, 36692), (Start: 21 @36701 has 15 MA's), (22, 36704), (30, 36740), (48, 36827), (65, 36917),

Gene: Thunderbird\_39 Start: 36320, Stop: 36631, Start Num: 7

Candidate Starts for Thunderbird\_39:

(Start: 6 @36317 has 101 MA's), (Start: 7 @36320 has 248 MA's), (Start: 16 @36383 has 8 MA's), (19, 36398), (Start: 21 @36407 has 15 MA's), (30, 36446), (48, 36533),

Gene: Timmi\_39 Start: 36322, Stop: 36636, Start Num: 6

Candidate Starts for Timmi\_39:

(Start: 6 @36322 has 101 MA's), (Start: 7 @36325 has 248 MA's), (Start: 16 @36388 has 8 MA's), (19, 36403), (Start: 21 @36412 has 15 MA's), (22, 36415), (30, 36451), (48, 36538), (65, 36628),

Gene: Tinciduntolum\_42 Start: 37856, Stop: 38221, Start Num: 4

Candidate Starts for Tinciduntolum\_42:

(Start: 4 @37856 has 27 MA's), (Start: 6 @37898 has 101 MA's), (Start: 7 @37901 has 248 MA's), (11, 37937), (Start: 16 @37964 has 8 MA's), (19, 37979), (24, 38000), (32, 38039), (56, 38162), (57, 38174), (62, 38204),

Gene: TinyTerror\_40 Start: 37248, Stop: 37571, Start Num: 7

Candidate Starts for TinyTerror\_40:

(2, 36960), (Start: 7 @37248 has 248 MA's), (Start: 21 @37335 has 15 MA's), (49, 37458), (54, 37479), (60, 37539), (63, 37548),

Gene: TomBombadil\_40 Start: 36607, Stop: 36921, Start Num: 6

Candidate Starts for TomBombadil\_40:

(Start: 6 @36607 has 101 MA's), (Start: 7 @36610 has 248 MA's), (Start: 16 @36673 has 8 MA's), (19, 36688), (Start: 21 @36697 has 15 MA's), (22, 36700), (30, 36736), (48, 36823), (65, 36913),

Gene: Tomlarah\_40 Start: 36601, Stop: 36912, Start Num: 7

Candidate Starts for Tomlarah\_40:

(Start: 6 @36598 has 101 MA's), (Start: 7 @36601 has 248 MA's), (Start: 16 @36664 has 8 MA's), (19, 36679), (Start: 21 @36688 has 15 MA's), (22, 36691), (30, 36727), (48, 36814), (65, 36904),

Gene: Toni\_39 Start: 36317, Stop: 36628, Start Num: 7

Candidate Starts for Toni\_39:

(Start: 6 @36314 has 101 MA's), (Start: 7 @36317 has 248 MA's), (Start: 16 @36380 has 8 MA's), (19, 36395), (Start: 21 @36404 has 15 MA's), (22, 36407), (30, 36443), (48, 36530), (65, 36620),

Gene: Tonitrus\_42 Start: 28395, Stop: 28634, Start Num: 12

Candidate Starts for Tonitrus\_42:

(11, 28389), (Start: 12 @28395 has 4 MA's), (24, 28455), (26, 28464), (38, 28503), (51, 28545), (55, 28560), (58, 28590), (59, 28608), (60, 28611), (64, 28626),

Gene: TooFast2Furius\_41 Start: 36843, Stop: 37157, Start Num: 6

Candidate Starts for TooFast2Furius\_41:

(Start: 6 @36843 has 101 MA's), (Start: 7 @36846 has 248 MA's), (Start: 16 @36909 has 8 MA's), (19, 36924), (Start: 21 @36933 has 15 MA's), (22, 36936), (30, 36972), (48, 37059), (65, 37149),

Gene: Tooj\_40 Start: 36674, Stop: 36985, Start Num: 7

Candidate Starts for Tooj\_40:

(Start: 6 @36671 has 101 MA's), (Start: 7 @36674 has 248 MA's), (Start: 16 @36737 has 8 MA's), (19, 36752), (Start: 21 @36761 has 15 MA's), (22, 36764), (30, 36800), (48, 36887), (65, 36977),

Gene: Tres\_41 Start: 37731, Stop: 38096, Start Num: 4

Candidate Starts for Tres\_41:

(Start: 4 @37731 has 27 MA's), (Start: 6 @37773 has 101 MA's), (Start: 7 @37776 has 248 MA's), (11, 37812), (Start: 16 @37839 has 8 MA's), (19, 37854), (24, 37875), (32, 37914), (56, 38037), (57, 38049), (62, 38079),

Gene: True\_39 Start: 36314, Stop: 36625, Start Num: 7

Candidate Starts for True\_39:

(Start: 6 @36311 has 101 MA's), (Start: 7 @36314 has 248 MA's), (Start: 16 @36377 has 8 MA's), (19, 36392), (Start: 21 @36401 has 15 MA's), (22, 36404), (30, 36440), (48, 36527), (65, 36617),

Gene: Trypo\_40 Start: 36610, Stop: 36921, Start Num: 7

Candidate Starts for Trypo\_40:

(Start: 6 @36607 has 101 MA's), (Start: 7 @36610 has 248 MA's), (Start: 16 @36673 has 8 MA's), (19, 36688), (Start: 21 @36697 has 15 MA's), (30, 36736), (48, 36823),

Gene: Tydolla\_40 Start: 37997, Stop: 38320, Start Num: 7

Candidate Starts for Tydolla\_40:

(2, 37709), (Start: 7 @37997 has 248 MA's), (Start: 21 @38084 has 15 MA's), (49, 38207), (54, 38228), (60, 38288), (63, 38297),

Gene: TyrionL\_39 Start: 36170, Stop: 36484, Start Num: 6

Candidate Starts for TyrionL\_39:

(Start: 6 @36170 has 101 MA's), (Start: 7 @36173 has 248 MA's), (Start: 16 @36236 has 8 MA's), (19, 36251), (Start: 21 @36260 has 15 MA's), (30, 36299), (48, 36386),

Gene: UAch1\_40 Start: 36620, Stop: 36934, Start Num: 6



Candidate Starts for UAch1\_40:

(Start: 6 @36620 has 101 MA's), (Start: 7 @36623 has 248 MA's), (Start: 16 @36686 has 8 MA's), (19, 36701), (Start: 21 @36710 has 15 MA's), (22, 36713), (30, 36749), (48, 36836), (65, 36926),

Gene: UncleHowie\_40 Start: 36313, Stop: 36624, Start Num: 7

Candidate Starts for UncleHowie\_40:

(Start: 6 @36310 has 101 MA's), (Start: 7 @36313 has 248 MA's), (Start: 16 @36376 has 8 MA's), (19, 36391), (Start: 21 @36400 has 15 MA's), (22, 36403), (30, 36439), (48, 36526), (65, 36616),

Gene: Usavi\_40 Start: 36614, Stop: 36925, Start Num: 7

Candidate Starts for Usavi\_40:

(Start: 6 @36611 has 101 MA's), (Start: 7 @36614 has 248 MA's), (Start: 16 @36677 has 8 MA's), (19, 36692), (Start: 21 @36701 has 15 MA's), (22, 36704), (30, 36740), (48, 36827), (65, 36917),

Gene: Vaishali24\_39 Start: 36275, Stop: 36586, Start Num: 7

Candidate Starts for Vaishali24\_39:

(Start: 6 @36272 has 101 MA's), (Start: 7 @36275 has 248 MA's), (Start: 16 @36338 has 8 MA's), (19, 36353), (Start: 21 @36362 has 15 MA's), (22, 36365), (30, 36401), (48, 36488), (65, 36578),

Gene: Valjean\_40 Start: 36606, Stop: 36917, Start Num: 7

Candidate Starts for Valjean\_40:

(Start: 6 @36603 has 101 MA's), (Start: 7 @36606 has 248 MA's), (Start: 16 @36669 has 8 MA's), (19, 36684), (Start: 21 @36693 has 15 MA's), (22, 36696), (30, 36732), (48, 36819), (65, 36909),

Gene: Veritas\_39 Start: 36176, Stop: 36487, Start Num: 7

Candidate Starts for Veritas\_39:

(Start: 6 @36173 has 101 MA's), (Start: 7 @36176 has 248 MA's), (Start: 16 @36239 has 8 MA's), (19, 36254), (Start: 21 @36263 has 15 MA's), (22, 36266), (30, 36302), (48, 36389), (65, 36479),

Gene: Vic9\_00040 Start: 38279, Stop: 38602, Start Num: 6

Candidate Starts for Vic9\_00040:

(Start: 4 @38237 has 27 MA's), (Start: 6 @38279 has 101 MA's), (Start: 7 @38282 has 248 MA's), (11, 38318), (Start: 16 @38345 has 8 MA's), (24, 38381), (32, 38420), (56, 38543), (62, 38585),

Gene: Vincenzo\_38 Start: 37651, Stop: 37962, Start Num: 7

Candidate Starts for Vincenzo\_38:

(Start: 6 @37648 has 101 MA's), (Start: 7 @37651 has 248 MA's), (Start: 9 @37675 has 1 MA's), (Start: 16 @37714 has 8 MA's), (19, 37729), (20, 37735), (Start: 21 @37738 has 15 MA's), (24, 37750), (26, 37759), (30, 37777), (38, 37816), (54, 37885), (57, 37918),

Gene: VioletZ\_37 Start: 36999, Stop: 37310, Start Num: 7

Candidate Starts for VioletZ\_37:

(Start: 6 @36996 has 101 MA's), (Start: 7 @36999 has 248 MA's), (Start: 16 @37062 has 8 MA's), (19, 37077), (20, 37083), (Start: 21 @37086 has 15 MA's), (24, 37098), (30, 37125), (38, 37164), (47, 37209), (48, 37212), (57, 37266), (60, 37290),

Gene: Virapocalypse\_40 Start: 36601, Stop: 36912, Start Num: 7

Candidate Starts for Virapocalypse\_40:

(Start: 6 @36598 has 101 MA's), (Start: 7 @36601 has 248 MA's), (Start: 16 @36664 has 8 MA's), (19, 36679), (Start: 21 @36688 has 15 MA's), (22, 36691), (30, 36727), (48, 36814), (65, 36904),

Gene: Virgeve\_39 Start: 36381, Stop: 36692, Start Num: 7

Candidate Starts for Virgeve\_39:

(Start: 6 @36378 has 101 MA's), (Start: 7 @36381 has 248 MA's), (Start: 16 @36444 has 8 MA's), (19, 36459), (Start: 21 @36468 has 15 MA's), (22, 36471), (30, 36507), (48, 36594), (65, 36684),

Gene: Vista\_40 Start: 36611, Stop: 36925, Start Num: 6

Candidate Starts for Vista\_40:

(Start: 6 @36611 has 101 MA's), (Start: 7 @36614 has 248 MA's), (Start: 16 @36677 has 8 MA's), (19, 36692), (Start: 21 @36701 has 15 MA's), (22, 36704), (30, 36740), (48, 36827), (65, 36917),

Gene: Vivaldi\_40 Start: 36640, Stop: 36954, Start Num: 6

Candidate Starts for Vivaldi\_40:

(Start: 6 @36640 has 101 MA's), (Start: 7 @36643 has 248 MA's), (Start: 16 @36706 has 8 MA's), (19, 36721), (Start: 21 @36730 has 15 MA's), (22, 36733), (30, 36769), (48, 36856), (65, 36946),

Gene: Vortex\_40 Start: 36320, Stop: 36631, Start Num: 7

Candidate Starts for Vortex\_40:

(Start: 6 @36317 has 101 MA's), (Start: 7 @36320 has 248 MA's), (Start: 16 @36383 has 8 MA's), (19, 36398), (Start: 21 @36407 has 15 MA's), (22, 36410), (30, 36446), (48, 36533), (65, 36623),

Gene: Waleliano\_37 Start: 36926, Stop: 37237, Start Num: 7

Candidate Starts for Waleliano\_37:

(Start: 6 @36923 has 101 MA's), (Start: 7 @36926 has 248 MA's), (Start: 16 @36989 has 8 MA's), (19, 37004), (20, 37010), (Start: 21 @37013 has 15 MA's), (24, 37025), (30, 37052), (38, 37091), (47, 37136), (48, 37139), (57, 37193), (60, 37217),

Gene: Wallhey\_39 Start: 36174, Stop: 36488, Start Num: 6

Candidate Starts for Wallhey\_39:

(Start: 6 @36174 has 101 MA's), (Start: 7 @36177 has 248 MA's), (Start: 16 @36240 has 8 MA's), (19, 36255), (Start: 21 @36264 has 15 MA's), (22, 36267), (30, 36303), (48, 36390),

Gene: Waterdiva\_40 Start: 36603, Stop: 36917, Start Num: 6

Candidate Starts for Waterdiva\_40:

(Start: 6 @36603 has 101 MA's), (Start: 7 @36606 has 248 MA's), (Start: 16 @36669 has 8 MA's), (19, 36684), (Start: 21 @36693 has 15 MA's), (22, 36696), (30, 36732), (48, 36819), (65, 36909),

Gene: Weher20\_40 Start: 36605, Stop: 36916, Start Num: 7

Candidate Starts for Weher20\_40:

(Start: 6 @36602 has 101 MA's), (Start: 7 @36605 has 248 MA's), (Start: 16 @36668 has 8 MA's), (19, 36683), (Start: 21 @36692 has 15 MA's), (30, 36731), (48, 36818),

Gene: West99\_41 Start: 37896, Stop: 38216, Start Num: 7

Candidate Starts for West99\_41:

(Start: 4 @37851 has 27 MA's), (Start: 6 @37893 has 101 MA's), (Start: 7 @37896 has 248 MA's), (11, 37932), (Start: 16 @37959 has 8 MA's), (19, 37974), (24, 37995), (32, 38034), (56, 38157), (57, 38169), (62, 38199),

Gene: Windsor\_39 Start: 36310, Stop: 36621, Start Num: 7

Candidate Starts for Windsor\_39:

(Start: 6 @36307 has 101 MA's), (Start: 7 @36310 has 248 MA's), (Start: 16 @36373 has 8 MA's), (19, 36388), (Start: 21 @36397 has 15 MA's), (22, 36400), (30, 36436), (48, 36523), (65, 36613),

Gene: Wooper\_35 Start: 31651, Stop: 31965, Start Num: 5

Candidate Starts for Wooper\_35:

(Start: 5 @31651 has 18 MA's), (27, 31783), (28, 31786), (29, 31795), (46, 31867), (57, 31924),

Gene: Xavier\_39 Start: 36327, Stop: 36638, Start Num: 7

Candidate Starts for Xavier\_39:

(Start: 6 @36324 has 101 MA's), (Start: 7 @36327 has 248 MA's), (Start: 16 @36390 has 8 MA's), (19, 36405), (Start: 21 @36414 has 15 MA's), (22, 36417), (30, 36453), (48, 36540), (65, 36630),

Gene: Xincheng\_36 Start: 36382, Stop: 36693, Start Num: 7

Candidate Starts for Xincheng\_36:

(Start: 6 @36379 has 101 MA's), (Start: 7 @36382 has 248 MA's), (Start: 16 @36445 has 8 MA's), (19, 36460), (20, 36466), (Start: 21 @36469 has 15 MA's), (24, 36481), (30, 36508), (38, 36547), (47, 36592), (48, 36595), (57, 36649), (60, 36673),

Gene: Yago84\_33 Start: 30634, Stop: 30945, Start Num: 5

Candidate Starts for Yago84\_33:

(3, 30427), (Start: 5 @30634 has 18 MA's), (27, 30766), (28, 30769), (57, 30904),

Gene: Yahalom\_40 Start: 37273, Stop: 37596, Start Num: 7

Candidate Starts for Yahalom\_40:

(2, 36985), (Start: 7 @37273 has 248 MA's), (Start: 21 @37360 has 15 MA's), (49, 37483), (54, 37504), (60, 37564), (63, 37573),

Gene: Yeshua\_35 Start: 31628, Stop: 31942, Start Num: 5

Candidate Starts for Yeshua\_35:

(Start: 5 @31628 has 18 MA's), (27, 31760), (28, 31763), (29, 31772), (46, 31844), (57, 31901),

Gene: Yinz\_40 Start: 37299, Stop: 37622, Start Num: 7

Candidate Starts for Yinz\_40:

(2, 37011), (Start: 7 @37299 has 248 MA's), (Start: 21 @37386 has 15 MA's), (49, 37509), (54, 37530), (60, 37590), (63, 37599),

Gene: Yoshand\_40 Start: 36613, Stop: 36924, Start Num: 7

Candidate Starts for Yoshand\_40:

(Start: 6 @36610 has 101 MA's), (Start: 7 @36613 has 248 MA's), (Start: 16 @36676 has 8 MA's), (19, 36691), (Start: 21 @36700 has 15 MA's), (22, 36703), (30, 36739), (48, 36826), (65, 36916),

Gene: YouGoGlencoco\_40 Start: 36605, Stop: 36919, Start Num: 6

Candidate Starts for YouGoGlencoco\_40:

(Start: 6 @36605 has 101 MA's), (Start: 7 @36608 has 248 MA's), (Start: 16 @36671 has 8 MA's), (19, 36686), (Start: 21 @36695 has 15 MA's), (22, 36698), (30, 36734), (48, 36821), (65, 36911),

Gene: Zaider\_41 Start: 36835, Stop: 37149, Start Num: 6

Candidate Starts for Zaider\_41:

(Start: 6 @36835 has 101 MA's), (Start: 7 @36838 has 248 MA's), (Start: 16 @36901 has 8 MA's), (19, 36916), (Start: 21 @36925 has 15 MA's), (22, 36928), (30, 36964), (48, 37051), (65, 37141),

Gene: Zelda\_40 Start: 36655, Stop: 36966, Start Num: 7

Candidate Starts for Zelda\_40:

(Start: 6 @36652 has 101 MA's), (Start: 7 @36655 has 248 MA's), (Start: 16 @36718 has 8 MA's), (19, 36733), (Start: 21 @36742 has 15 MA's), (22, 36745), (30, 36781), (48, 36868), (65, 36958),

Gene: Zemanar\_38 Start: 36929, Stop: 37240, Start Num: 7

Candidate Starts for Zemanar\_38:

(Start: 6 @36926 has 101 MA's), (Start: 7 @36929 has 248 MA's), (Start: 16 @36992 has 8 MA's), (19, 37007), (20, 37013), (Start: 21 @37016 has 15 MA's), (24, 37028), (30, 37055), (38, 37094), (47, 37139), (48, 37142), (57, 37196), (60, 37220),

Gene: Zenteno07\_44 Start: 36234, Stop: 36545, Start Num: 7

Candidate Starts for Zenteno07\_44:

(Start: 6 @36231 has 101 MA's), (Start: 7 @36234 has 248 MA's), (Start: 16 @36297 has 8 MA's), (19, 36312), (23, 36330), (37, 36396), (43, 36435), (65, 36537),

Gene: Zonia\_40 Start: 36627, Stop: 36938, Start Num: 7

Candidate Starts for Zonia\_40:

(Start: 6 @36624 has 101 MA's), (Start: 7 @36627 has 248 MA's), (Start: 16 @36690 has 8 MA's), (19, 36705), (Start: 21 @36714 has 15 MA's), (22, 36717), (30, 36753), (48, 36840),