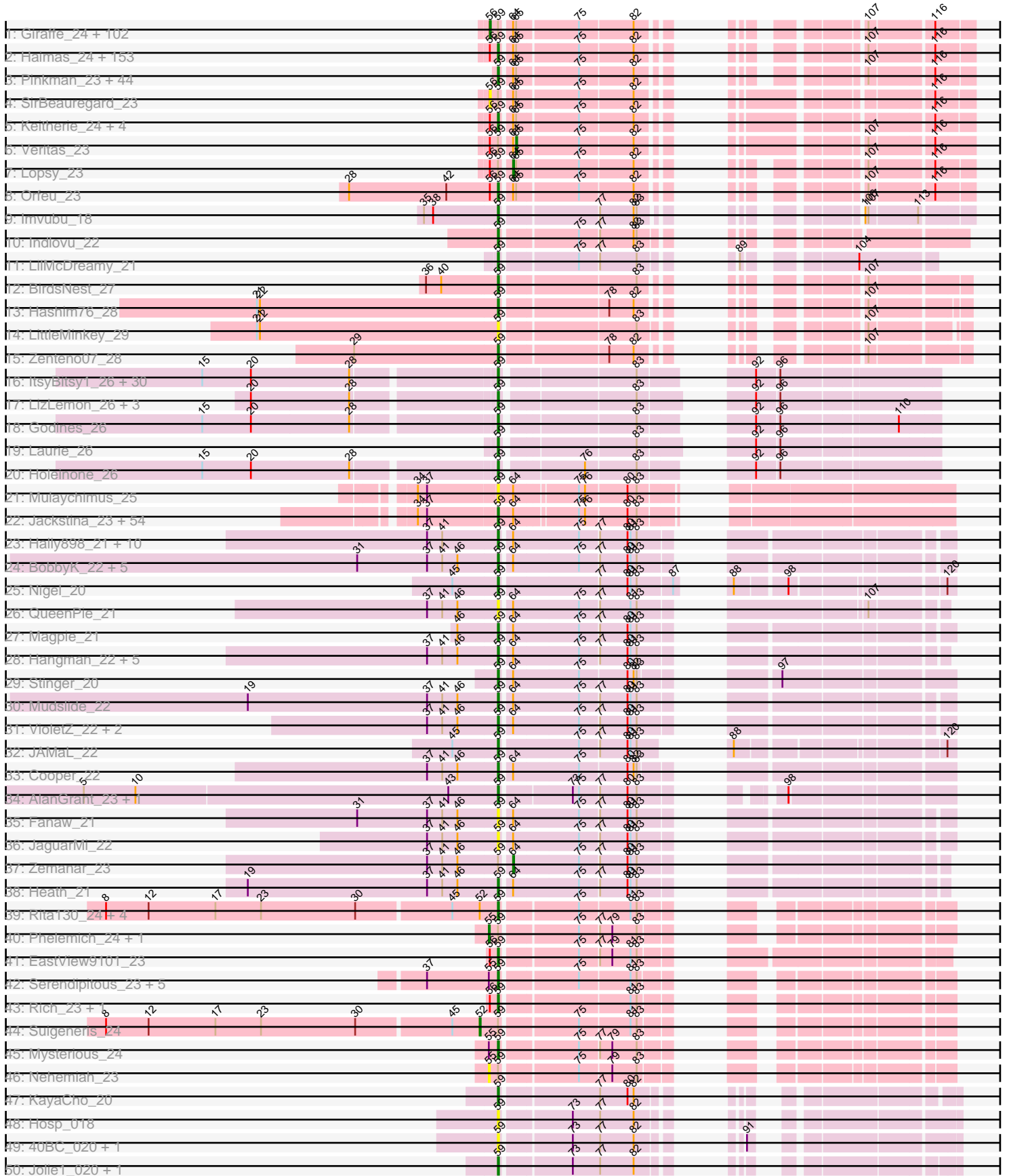
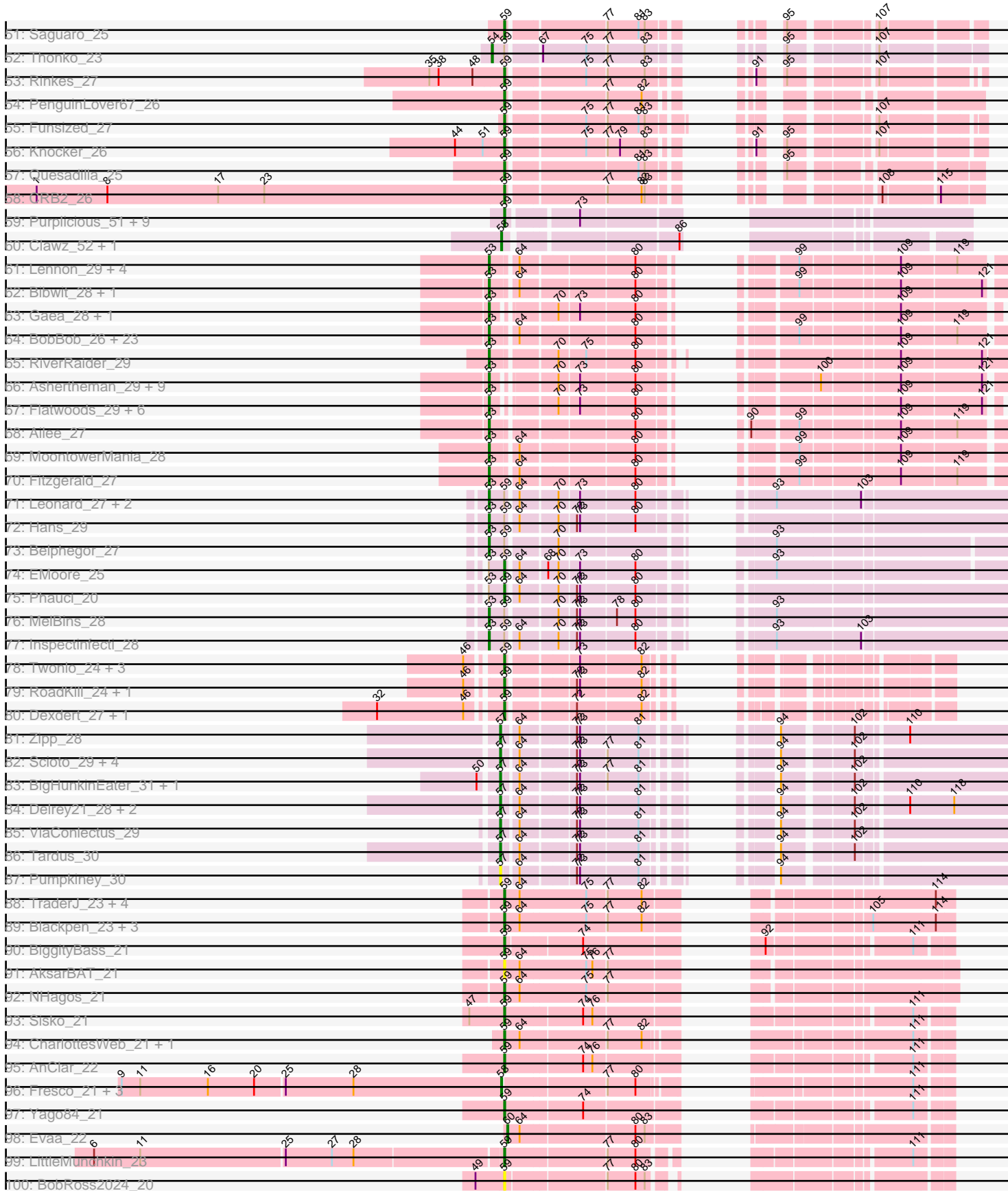


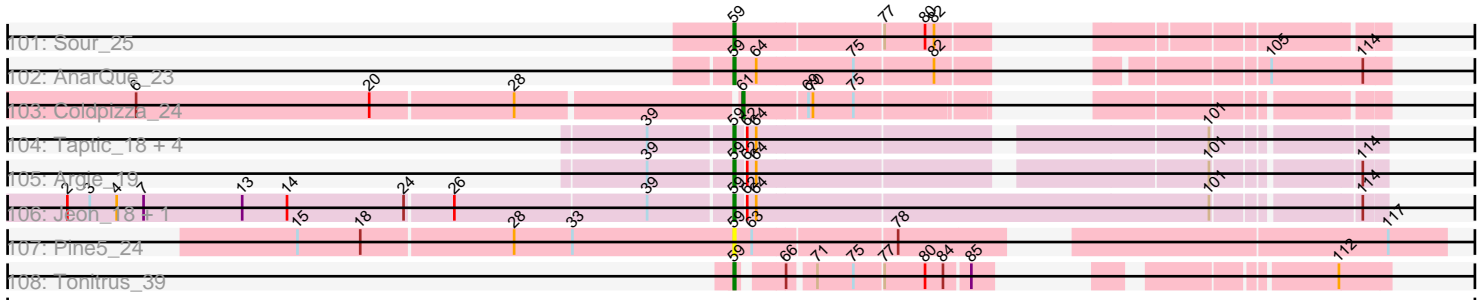
Pham 294307



Pham 294307



Pham 294307



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 294307 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294307 has 618 members, 86 are drafts.

Phages represented in each track:

- Track 1 : Giraffe\_24, Flake\_25, Serpentine\_0024, Chunky\_24, Hetaeria\_24, Oosterbaan\_24, Burr\_23, Valjean\_24, SilverBell\_24, BatteryCK\_23, Mcshane\_23, Prickles\_24, Riverton\_23, Thora\_24, Nacho\_0024, Altwerkus\_23, Basato\_25, KLucky39\_24, OSmaximus\_24, Cher\_23, Pipsqueak\_24, Toni\_23, SDcharge11\_24, Gareth\_23, Megamind20\_24, MichaelPhcott\_23, Waterdiva\_24, Manad\_23, Squid\_24, Olak\_23, Chute\_23, ABU\_24, Numberten\_24, TooFast2Furius\_25, Scoot17C\_24, Murdoc\_24, Yoshand\_24, PhrankReynolds\_23, Virgeve\_23, MitKao\_24, Lulumae\_23, Serendipity\_24, Orion\_24, Roy17\_24, Cobra\_24, Dingo\_24, LeeLot\_24, PinheadLarry\_24, Beaglebox\_23, PhenghisKhan\_23, Sophia\_23, Jillium\_23, Grand2040\_23, Surely\_24, Mosaic\_23, ProfessorX\_24, Jesabah\_24, IsaacEli\_24, Roliet\_24, Harvey\_24, Kikipoo\_24, Telesworld\_23, Charles1\_24, QueenBeane\_24, Lego3393\_24, Colbert\_24, Fang\_24, YouGoGlencoco\_24, UncleHowie\_24, ShiVal\_24, Chipette\_25, DonSanchon\_23, TallGrassMM\_24, PallasAthena\_24, Morgushi\_24, Lasso\_24, JacAttac\_24, Carthage\_22, Puhltonio\_24, Riggan\_24, Dione\_23, Mesh1\_24, Timmi\_23, Daka\_24, TomBombadil\_24, Lehmann\_24, Phipps\_24, Craff\_24, PhatCats2014\_24, Suffolk\_24, Piglet\_0023, CamL\_24, Vaticameos\_24, SallyH\_24, DoLOn\_25, Podrick\_24, Vista\_24, Tooj\_24, Orwigg\_23, Anderson\_24, PG1\_24, Vortex\_24, Chah\_25
- Track 2 : Haimas\_24, Banjo\_23, Mikota\_24, ShadowBud\_24, Pops\_24, Larson\_25, Adriana\_24, Nicole21\_24, FremontTroll\_24, Phleuron\_23, Kimbrough\_24, Maru\_23, Triad\_24, Selr12\_24, Rimu\_24, Inchworm\_24, BlackStallion\_24, Matalotodo\_24, KingVeVeVe\_24, Caspiboi\_23, Iridoclysis\_24, Usavi\_24, Gyarad\_0024, Zelda\_24, EmpTee\_24, Eugenia\_24, Mulan\_23, Pherdinand\_24, LuckyMarjie\_23, DirtJuice\_24, Phergie\_23, Frankicide\_24, Magic8\_24, Thunderbird\_23, Boehler\_24, Hertubise\_24, Buckeye\_24, Gwilliam\_24, Skippy\_24, Coletti\_24, Antonia\_23, Plmatters\_24, Freya\_23, Newman\_24, Kwadwo\_23, Kailash\_24, Legolas\_23, Simielle\_23, Mana\_23, RedRaider89\_25, Cornobble\_23, Hamish\_24, MelsMeow\_23, Andre\_24, ThreeOh3D2\_24, OliverWalter\_24, FluffyNinja\_24, Mecca\_23, LostAndPhound\_23, Schadenfreude\_23, HighStump\_23, Scrick\_24, Mag7\_23, Haleema\_23, Swish\_24, Lumine\_23, Mutante\_23, Bishoperium\_23, Childish\_23, BoogieWoogie\_23, Sigman\_24, Lulwa\_24, Xavier\_23, GreenChile\_24, CheetO\_24, Emiris\_24, Spartan300\_24, Megatron\_24, HenryJackson\_23, Bluephacebaby\_23, KlimbOn\_24, Gwennie1\_24, PhrodoBaggins\_23, ElvisPhasley\_24, Apizium\_23, Slatt\_24, AngelCake\_24, Virapocalypse\_24, Crownjwl\_24, Aonishiki\_24, SassyCat97\_23, Fozzie\_23, Omniscient\_24, MiniBoss\_24, Ricotta\_23, Badfish\_24, Held\_24, JangoPhett\_24, Horchata\_24, DoesntMatter\_24, Nyala\_23, Phareon\_24, AbsoluteMadLad\_23, Kahve\_23, LeiMonet\_24, Inverness\_24, Quisquilliae\_24,

Cosmolli16\_23, LemonSlice\_24, Olive\_24, Cannibal\_24, Gophee\_24, HSavage\_24, Eremos\_24, Jiraiya\_23, Dice\_23, LasagnaCat\_24, MRabcd\_23, UAch1\_24, Sheila\_24, Samaymay\_24, Happabalu\_24, Katniss\_24, Squiggle\_24, Daffy\_24, AltPhacts\_24, Kloppinator\_24, Potter\_23, Tomlarah\_24, Soto\_24, Hartsy\_24, Zaider\_25, True\_23, Morty\_24, Roscoe\_25, Phunky\_24, Fringe\_24, Phamished\_24, FugateOSU\_23, Vaishali24\_23, BlueHusk\_24, Robyn\_23, FriarPreacher\_24, Mesmerelda\_23, CampRoach\_24, RedMaple\_23, Pacifista\_23, Solosis\_23, Khan1\_24, Aelin\_23, Chorkpop\_24, Placalicious\_23, Vivaldi\_24, Chuni\_23

- Track 3 : Pinkman\_23, OneBrain\_24, Hekos\_21, DelRivs\_23, DuchessDung\_22, Aleia\_24, MrPhizzler\_24, Oline\_23, Maskar\_23, Derpp\_23, Ashraf\_23, Cornbread\_23, TyrionL\_23, Zonia\_24, Trypo\_24, Plata\_24, Swiphy\_24, Etaye\_24, Doddsville\_24, Duggie\_23, Schueller\_23, JakeO\_23, Hocus\_23, ImtiyazSitla\_23, Durga\_24, HogWash\_23, Karn\_23, BlacksBerry\_23, GeneCoco\_24, Dati\_24, DaddyDaniels\_24, Soile\_24, FleetyMac\_23, Longacauda\_23, Wallhey\_23, Kwksand96\_23, Brilliant\_24, Jiminy\_23, Struggle\_23, Weher20\_24, PhatLouie\_24, Melc17\_24, Labeouficaum\_23, CharlieGBrown\_23, JDog\_23
- Track 4 : SirBeauregard\_23
- Track 5 : Keitherie\_24, Nathan\_24, Windsor\_23, Iridessa\_24, Chaelin\_23
- Track 6 : Veritas\_23
- Track 7 : Lopsy\_23
- Track 8 : Orfeu\_23
- Track 9 : Imvubu\_18
- Track 10 : Indlovu\_22
- Track 11 : LilMcDreamy\_21
- Track 12 : BirdsNest\_27
- Track 13 : Hashim76\_28
- Track 14 : LittleMinkey\_29
- Track 15 : Zenteno07\_28
- Track 16 : ItsyBitsy1\_26, Phantasmagoria\_26, Vic9\_00026, Allegro\_26, Sabella\_26, Kheth\_26, Faze9\_26, Coffee\_26, Kaleb\_26, West99\_26, TA17A\_27, Calamitous\_26, Kolhan\_26, Rhinoforte\_26, Brownie5\_26, Opia\_26, FrenchFry\_26, Tinciduntolum\_27, Tres\_26, MasterPo\_26, Lars\_26, Bananafish\_26, Eaglehorse\_26, Boyle\_26, Rosebush\_26, Hedgerow\_26, PrinceCharming\_26, Glass\_26, Blocker23\_26, Ares\_26, Lephleur\_26
- Track 17 : LizLemon\_26, LilSmirk\_26, Arbiter\_26, Qyrzula\_24
- Track 18 : Godines\_26
- Track 19 : Laurie\_26
- Track 20 : Holeinone\_26
- Track 21 : Mulaychimus\_25
- Track 22 : Jackstina\_23, Bernardo\_25, Baloo\_25, Briakila\_25, Phlyer\_25, Phayeta\_25, SwainyDoc\_25, Ben11\_24, TinyTerror\_25, Olivio\_24, LestyG\_25, Yinz\_25, MmasiCarm\_25, HarveySr\_25, Phaedrus\_23, Chalmers\_25, OrangeOswald\_25, Marlia\_25, GlenHope\_26, RomaT\_25, Chentzyk\_24, Audrey\_25, ChaChing\_25, Athena\_26, Glubnar\_26, Neos5\_25, SynergyX\_25, Yahalom\_25, Corofin\_25, Tydolla\_25, SlippinJimmy\_25, Marley1013\_25, Daisy\_25, Devonte\_25, RagingRooster\_25, Heathcliff\_25, Akoma\_25, Philly\_24, Kronus\_24, Halfpint\_24, Chandler\_25, Gadget\_26, Abinghost\_25, Deenasa\_25, Nozo\_25, Obutu\_25, Morty007\_25, Shenandoah\_25, Mortcellus\_24, Gervas\_25, Rita1961\_25, Pipefish\_25, Compostia\_26, Casbah\_24, Kamiyu\_25
- Track 23 : Hally898\_21, Antihero\_21, Ahwei\_21, Poster\_21, ChrisnMich\_21, Lambano\_21, Epah\_21, GinPorsche\_21, LittleDigger\_21, Nanao\_21, Renkei\_21
- Track 24 : BobbyK\_22, Frederick\_22, RawrgerThat\_22, Prince\_22, Apex\_22, Austelle\_23

- Track 25 : Nigel\_20
- Track 26 : QueenPie\_21
- Track 27 : Magpie\_21
- Track 28 : Hangman\_22, Waleliano\_22, BrownCNA\_23, Mithril\_22, Xincheng\_21, JoyceMaria\_22
- Track 29 : Stinger\_20
- Track 30 : Mudslide\_22
- Track 31 : VioletZ\_22, Hydro\_22, Lolalove\_22
- Track 32 : JAMaL\_22
- Track 33 : Cooper\_22
- Track 34 : AlanGrant\_23, Vincenzo\_23
- Track 35 : Fanaw\_21
- Track 36 : JaguarMi\_22
- Track 37 : Zemanar\_23
- Track 38 : Heath\_21
- Track 39 : Rita130\_24, Reccee\_25, Acadian\_24, Donny\_24, SirJeffery\_24
- Track 40 : Phelemich\_24, Reprobate\_24
- Track 41 : EastView9101\_23
- Track 42 : Serendipitous\_23, Shenyu\_24, StinkyVeggy\_26, DigitDog\_24, KarasumaRum\_26, Nangang\_24
- Track 43 : Rich\_23, Bae\_23
- Track 44 : Suigeneris\_24
- Track 45 : Mysterious\_24
- Track 46 : Nehemiah\_23
- Track 47 : KayaCho\_20
- Track 48 : Hosp\_018
- Track 49 : 40BC\_020, 39HC\_020
- Track 50 : Jolie1\_020, ForDig\_20
- Track 51 : Saguaro\_25
- Track 52 : Thonko\_23
- Track 53 : Rinkes\_27
- Track 54 : PenguinLover67\_26
- Track 55 : Funsized\_27
- Track 56 : Knocker\_26
- Track 57 : Quesadilla\_25
- Track 58 : CRB2\_26
- Track 59 : Purplicious\_51, DonTron\_52, Sting\_51, Grumio\_52, KingstonB\_53, ColdSoup\_53, Amo99\_53, Stillion\_52, Jollymon\_52, Soos\_48
- Track 60 : Clawz\_52, Makar\_53
- Track 61 : Lennon\_29, Stultus\_27, Fosterous\_27, Affeca\_27, Sitar\_29
- Track 62 : Bibwit\_28, Sedona\_29
- Track 63 : Gaea\_28, JKSyngboy\_26
- Track 64 : BobBob\_26, Sanjuju\_27, Galadriel\_29, Barsten\_29, Shivanishola\_30, Jabberwocky\_27, Kewpiedoll\_28, ChadMasterC\_29, FuegoCuervo\_31, Rofo\_29, Brandonk123\_30, Keitabear\_29, McKinley\_31, Nordenberg\_23, Geodirt\_26, Love\_32, McCrothy\_29, Kamashten\_28, Charming\_29, Tangent\_29, Angelicage\_27, Vivi2\_31, Thing3\_28, Paries\_31
- Track 65 : RiverRaider\_29
- Track 66 : Ashertheman\_29, Tycho\_28, Baumdotcom\_28, Tangerine\_28, Gustavo\_28, LilHam\_26, SchottB\_27, Saronaya\_28, StorminNorm\_28, Kwobi\_30
- Track 67 : Flatwoods\_29, Bizzy\_29, Derg\_24, Kroos\_29, Ribeye\_29, YorkOnyx\_29, Baddon\_28
- Track 68 : Ailee\_27

- Track 69 : MoontowerMania\_28
- Track 70 : Fitzgerald\_27
- Track 71 : Leonard\_27, Ali17\_25, Phinally\_27
- Track 72 : Hans\_29
- Track 73 : Belphegor\_27
- Track 74 : EMOore\_25
- Track 75 : Phauci\_20
- Track 76 : MelBins\_28
- Track 77 : Inspectinfecti\_28
- Track 78 : Twonlo\_24, Tiamoceli\_27, EdmundFerry\_25, Chickadee\_26
- Track 79 : RoadKill\_24, GTE6\_26
- Track 80 : Dxdert\_27, Kwekel\_26
- Track 81 : Zipp\_28
- Track 82 : Scioto\_29, Natkenzie\_29, Sampson\_29, Abblin\_29, APunk\_30
- Track 83 : BigHunkinEater\_31, Zitch\_30
- Track 84 : Delrey21\_28, DoctorFroggo\_28, Verity\_28
- Track 85 : ViaConlectus\_29
- Track 86 : Tardus\_30
- Track 87 : Pumpkiney\_30
- Track 88 : TraderJ\_23, CaiB\_23, Wooper\_23, FelixTres\_23, Yeshua\_23
- Track 89 : Blackpen\_23, CloverMinnie\_23, MakoManhole\_23, MossRose\_23
- Track 90 : BiggityBass\_21
- Track 91 : AksarBAT\_21
- Track 92 : NHagos\_21
- Track 93 : Sisko\_21
- Track 94 : CharlottesWeb\_21, Mariokart\_21
- Track 95 : AnClar\_22
- Track 96 : Fresco\_21, Axumite\_21, Shatter\_21, Ligma\_21
- Track 97 : Yago84\_21
- Track 98 : Evaa\_22
- Track 99 : LittleMunchkin\_23
- Track 100 : BobRoss2024\_20
- Track 101 : Sour\_25
- Track 102 : AnarQue\_23
- Track 103 : Coldpizza\_24
- Track 104 : Taptic\_18, PR\_18, Cepens\_18, D12\_18, Megabear\_18
- Track 105 : Argie\_19
- Track 106 : Jeon\_18, GodPhather\_19
- Track 107 : Pine5\_24
- Track 108 : Tonitrus\_39

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

The start number called the most often in the published annotations is 59, it was called in 357 of the 532 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 39HC\_020, 40BC\_020, Abinghost\_25, AbsoluteMadLad\_23, Acadian\_24, Adriana\_24, Aelin\_23, Ahwei\_21, Akoma\_25, AksarBAT\_21, AlanGrant\_23, Aleia\_24, Allegro\_26, AltPhacts\_24, Amo99\_53, AnClar\_22, AnarQue\_23, Andre\_24,

AngelCake\_24, Antihero\_21, Antonia\_23, Aonishiki\_24, Apex\_22, Apizium\_23, Arbiter\_26, Ares\_26, Argie\_19, Ashraf\_23, Athena\_26, Audrey\_25, Austelle\_23, Badfish\_24, Bae\_23, Baloo\_25, Bananafish\_26, Banjo\_23, Ben11\_24, Bernardo\_25, BiggityBass\_21, BirdsNest\_27, Bishoperium\_23, BlackStallion\_24, Blackpen\_23, BlacksBerry\_23, Blocker23\_26, BlueHusk\_24, Bluephacebaby\_23, BobRoss2024\_20, BobbyK\_22, Boehler\_24, BoogieWoogie\_23, Boyle\_26, Briakila\_25, Brilliant\_24, BrownCNA\_23, Brownie5\_26, Buckeye\_24, CRB2\_26, CaiB\_23, Calamitous\_26, CampRoach\_24, Cannibal\_24, Casbah\_24, Caspiboi\_23, Cepens\_18, ChaChing\_25, Chaelin\_23, Chalmers\_25, Chandler\_25, CharlieGBrown\_23, CharlottesWeb\_21, CheetO\_24, Chentzyk\_24, Chickadee\_26, Childish\_23, Chorkpop\_24, ChrisMich\_21, Chuni\_23, CloverMinnie\_23, Coffee\_26, ColdSoup\_53, Coletti\_24, Compostia\_26, Cooper\_22, Cornbread\_23, Cornobble\_23, Corofin\_25, Cosmolli16\_23, Crownjwl\_24, D12\_18, DaddyDaniels\_24, Daffy\_24, Daisy\_25, Dati\_24, Deenasa\_25, DelRivs\_23, Derpp\_23, Devonte\_25, Dexdert\_27, Dice\_23, DigitDog\_24, DirtJuice\_24, Doddsville\_24, DoesntMatter\_24, DonTron\_52, Donny\_24, DuchessDung\_22, Duggie\_23, Durga\_24, EMOore\_25, Eaglehorse\_26, EastView9101\_23, EdmundFerry\_25, ElvisPhasley\_24, Emiris\_24, EmpTee\_24, Epah\_21, Eremos\_24, Etaye\_24, Eugenia\_24, Fanaw\_21, Faze9\_26, FelixTres\_23, FleetyMac\_23, FluffyNinja\_24, ForDig\_20, Fozzie\_23, Frankicide\_24, Frederick\_22, FremontTroll\_24, FrenchFry\_26, Freya\_23, FriarPreacher\_24, Fringe\_24, FugateOSU\_23, Funsized\_27, GTE6\_26, Gadget\_26, GeneCoco\_24, Gervas\_25, GinPorsche\_21, Glass\_26, GlenHope\_26, Glubnar\_26, GodPhather\_19, Godines\_26, Gophee\_24, GreenChile\_24, Grumio\_52, Gwennie1\_24, Gwilliam\_24, Gyarad\_0024, HSavage\_24, Haimas\_24, Haleema\_23, Halfpint\_24, Hally898\_21, Hamish\_24, Hangman\_22, Happabalu\_24, Hartsy\_24, HarveySr\_25, Hashim76\_28, Heath\_21, Heathcliff\_25, Hedgerow\_26, Hekos\_21, Held\_24, HenryJackson\_23, Hertubise\_24, HighStump\_23, Hocus\_23, HogWash\_23, Holeinone\_26, Horchata\_24, Hosp\_018, Hydro\_22, ImtiyazSitla\_23, Imvubu\_18, Inchworm\_24, Indlovu\_22, Inverness\_24, Iridessa\_24, Iridoclysis\_24, ItsyBitsy1\_26, JAMaL\_22, JDog\_23, Jackstina\_23, JaguarMi\_22, JakeO\_23, JangoPhett\_24, Jeon\_18, Jiminy\_23, Jiraiya\_23, Jolie1\_020, Jollymon\_52, JoyceMaria\_22, Kahve\_23, Kailash\_24, Kaleb\_26, Kamiyu\_25, KarasumaRum\_26, Karn\_23, Katniss\_24, KayaCho\_20, Keitherie\_24, Khan1\_24, Kheth\_26, Kimbrough\_24, KingVeVeVe\_24, KingstonB\_53, KlimbOn\_24, Kloppinator\_24, Knocker\_26, Kolhan\_26, Kronus\_24, Kwadwo\_23, Kwekel\_26, Kwksand96\_23, Labeouficaum\_23, Lambano\_21, Lars\_26, Larson\_25, LasagnaCat\_24, Laurie\_26, Legolas\_23, LeiMonet\_24, LemonSlice\_24, Lephleur\_26, LestyG\_25, LilMcDreamy\_21, LilSmirk\_26, LittleDigger\_21, LittleMinkey\_29, LittleMunchkin\_23, LizLemon\_26, Lolalove\_22, Longacauda\_23, LostAndPhound\_23, LuckyMarjie\_23, Lulwa\_24, Lumine\_23, MRabcd\_23, Mag7\_23, Magic8\_24, Magpie\_21, MakoManhole\_23, Mana\_23, Mariokart\_21, Marley1013\_25, Marlia\_25, Maru\_23, Maskar\_23, MasterPo\_26, Matalotodo\_24, Mecca\_23, Megabear\_18, Megatron\_24, Melc17\_24, MelsMeow\_23, Mesmerelda\_23, Mikota\_24, MiniBoss\_24, Mithril\_22, MmasiCarm\_25, Mortcellus\_24, Morty007\_25, Morty\_24, MossRose\_23, MrPhizzler\_24, Mudslide\_22, Mulan\_23, Mulaychimus\_25, Mutante\_23, Mysterious\_24, NHagos\_21, Nanao\_21, Nangang\_24, Nathan\_24, Neos5\_25, Newman\_24, Nicole21\_24, Nigel\_20, Nozo\_25, Nyala\_23, Obutu\_25, Oline\_23, Olive\_24, OliverWalter\_24, Olivio\_24, Omniscient\_24, OneBrain\_24, Opia\_26, OrangeOswald\_25, Orfeu\_23, PR\_18, Pacifista\_23, PenguinLover67\_26, Phaedrus\_23, Phamished\_24, Phantasmagoria\_26, Phareon\_24, PhatLouie\_24, Phauci\_20, Phayeta\_25, Pherdinand\_24, Phergie\_23, Philly\_24, Phleuron\_23, Phlyer\_25, PhrodoBaggins\_23, Phunky\_24, Pine5\_24, Pinkman\_23, Pipefish\_25, Placalicious\_23, Plata\_24, Plmatters\_24, Pops\_24, Poster\_21, Potter\_23, PrinceCharming\_26, Prince\_22, Purplicious\_51, QueenPie\_21, Quesadilla\_25,

Quisquilliae\_24, Qyrzula\_24, RagingRooster\_25, RawrgerThat\_22, Reccee\_25, RedMaple\_23, RedRaider89\_25, Renkei\_21, Rhinoforte\_26, Rich\_23, Ricotta\_23, Rimu\_24, Rinkes\_27, Rita130\_24, Rita1961\_25, RoadKill\_24, Robyn\_23, RomaT\_25, Roscoe\_25, Rosebush\_26, Sabella\_26, Saguario\_25, Samaymay\_24, SassyCat97\_23, Schadenfreude\_23, Schueller\_23, Scrick\_24, Selr12\_24, Serendipitous\_23, ShadowBud\_24, Sheila\_24, Shenandoah\_25, Shenyu\_24, Sigman\_24, Simielle\_23, SirJeffery\_24, Sisko\_21, Skippy\_24, Slatt\_24, SlippinJimmy\_25, Soile\_24, Solosis\_23, Soos\_48, Soto\_24, Sour\_25, Spartan300\_24, Squiggle\_24, Stillion\_52, Sting\_51, Stinger\_20, StinkyVeggy\_26, Struggle\_23, SwainyDoc\_25, Swiphy\_24, Swish\_24, SynergyX\_25, TA17A\_27, Taptic\_18, ThreeOh3D2\_24, Thunderbird\_23, Tiamoceli\_27, Tinciduntolum\_27, TinyTerror\_25, Tomlarah\_24, Tonitrus\_39, TraderJ\_23, Tres\_26, Triad\_24, True\_23, Trypo\_24, Twonlo\_24, Tydolla\_25, TyrionL\_23, UAch1\_24, Usavi\_24, Vaishali24\_23, Vic9\_00026, Vincenzo\_23, VioletZ\_22, Virapocalypse\_24, Vivaldi\_24, Waleliano\_22, Wallhey\_23, Weher20\_24, West99\_26, Windsor\_23, Wooper\_23, Xavier\_23, Xincheng\_21, Yago84\_21, Yahalom\_25, Yeshua\_23, Yinz\_25, Zaider\_25, Zelda\_24, Zenteno07\_28, Zonia\_24,

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

- ABU\_24, Ali17\_25, Altwerkus\_23, Anderson\_24, Basato\_25, BatteryCK\_23, Beaglebox\_23, Belphegor\_27, Burr\_23, CamL\_24, Carthage\_22, Chah\_25, Charles1\_24, Cher\_23, Chipette\_25, Chunky\_24, Chute\_23, Cobra\_24, Colbert\_24, Craff\_24, Daka\_24, Dingo\_24, Dione\_23, DoIOn\_25, DonSanchon\_23, Fang\_24, Flake\_25, Gareth\_23, Giraffe\_24, Grand2040\_23, Hans\_29, Harvey\_24, Hetaeria\_24, Inspectinfecti\_28, IsaacEli\_24, JacAttac\_24, Jesabah\_24, Jillium\_23, KLucky39\_24, Kikipoo\_24, Lasso\_24, LeeLot\_24, Lego3393\_24, Lehmann\_24, Leonard\_27, Lopsy\_23, Lulumae\_23, Manad\_23, Mcshane\_23, Megamind20\_24, MelBins\_28, Mesh1\_24, MichaelPhcott\_23, MitKao\_24, Morgushi\_24, Mosaic\_23, Murdoc\_24, Nacho\_0024, Nehemiah\_23, Numberten\_24, OSmaximus\_24, Olak\_23, Oosterbaan\_24, Orion\_24, Orwigg\_23, PG1\_24, PallasAthena\_24, PhatCats2014\_24, Phelemich\_24, PhenghisKhan\_23, Phinally\_27, Phipps\_24, PhrankReynolds\_23, Piglet\_0023, PinheadLarry\_24, Pipsqueak\_24, Podrick\_24, Prickles\_24, ProfessorX\_24, Puhltonio\_24, QueenBeane\_24, Reprobate\_24, Riggan\_24, Riverton\_23, Roliet\_24, Roy17\_24, SDcharge11\_24, SallyH\_24, Scoot17C\_24, Serendipity\_24, Serpentine\_0024, ShiVal\_24, SilverBell\_24, SirBeauregard\_23, Sophia\_23, Squid\_24, Suffolk\_24, Suigeneris\_24, Surely\_24, TallGrassMM\_24, Telesworld\_23, Thonko\_23, Thora\_24, Timmi\_23, TomBombadil\_24, Toni\_23, TooFast2Furius\_25, Tooj\_24, UncleHowie\_24, Valjean\_24, Vaticameos\_24, Veritas\_23, Virgeve\_23, Vista\_24, Vortex\_24, Waterdiva\_24, Yoshand\_24, YouGoGlencoco\_24, Zemanar\_23,

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

- APunk\_30, Abblin\_29, Affeca\_27, Ailee\_27, Angelicage\_27, Ashertheman\_29, Axumite\_21, Baddon\_28, Barsten\_29, Baumdotcom\_28, Bibwit\_28, BigHunkinEater\_31, Bizzy\_29, BobBob\_26, Brandonk123\_30, ChadMasterC\_29, Charming\_29, Clawz\_52, Coldpizza\_24, Delrey21\_28, Derg\_24, DoctorFroggo\_28, Evaa\_22, Fitzgerald\_27, Flatwoods\_29, Fosterous\_27, Fresco\_21, FuegoCuervo\_31, Gaea\_28, Galadriel\_29, Geodirt\_26, Gustavo\_28, JKSyngboy\_26, Jabbberwocky\_27, Kamashten\_28, Keitabear\_29, Kewpiedoll\_28, Kroos\_29, Kwobi\_30, Lennon\_29, Ligma\_21, LilHam\_26, Love\_32, Makar\_53, McCrothy\_29, McKinley\_31, MoontowerMania\_28, Natkenzie\_29, Nordenberg\_23, Paries\_31, Pumpkiney\_30, Ribeye\_29, RiverRaider\_29, Rofo\_29, Sampson\_29, Sanjuju\_27, Saronaya\_28, SchottB\_27, Scioto\_29, Sedona\_29, Shatter\_21, Shivanishola\_30, Sitar\_29,

StorminNorm\_28, Stultus\_27, Tangent\_29, Tangerine\_28, Tardus\_30, Thing3\_28, Tycho\_28, Verity\_28, ViaConlectus\_29, Vivi2\_31, YorkOnyx\_29, Zipp\_28, Zitch\_30,

### Summary by start number:

#### Start 52:

- Found in 6 of 618 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 1 of 532
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Suigeneris\_24 (B5),

#### Start 53:

- Found in 63 of 618 ( 10.2% ) of genes in pham
- Manual Annotations of this start: 60 of 532
- Called 96.8% of time when present
- Phage (with cluster) where this start called: Affeca\_27 (DE1), Ailee\_27 (DE1), Ali17\_25 (DE2), Angelicage\_27 (DE1), Ashertheman\_29 (DE1), Baddon\_28 (DE1), Barsten\_29 (DE1), Baumdotcom\_28 (DE1), Belphegor\_27 (DE2), Bibwit\_28 (DE1), Bizzy\_29 (DE1), BobBob\_26 (DE1), Brandonk123\_30 (DE1), ChadMasterC\_29 (DE1), Charming\_29 (DE1), Derg\_24 (DE1), Fitzgerald\_27 (DE1), Flatwoods\_29 (DE1), Fosterous\_27 (DE1), FuegoCuervo\_31 (DE1), Gaea\_28 (DE1), Galadriel\_29 (DE1), Geodirt\_26 (DE1), Gustavo\_28 (DE1), Hans\_29 (DE2), Inspectinfecti\_28 (DE2), JKSyngboy\_26 (DE1), Jabberwocky\_27 (DE1), Kamashten\_28 (DE1), Keitabear\_29 (DE1), Kewpiedoll\_28 (DE1), Kroos\_29 (DE1), Kwobi\_30 (DE1), Lennon\_29 (DE1), Leonard\_27 (DE2), LilHam\_26 (DE1), Love\_32 (DE1), McCrothy\_29 (DE1), McKinley\_31 (DE1), MelBins\_28 (DE2), MoontowerMania\_28 (DE1), Nordenberg\_23 (DE1), Paries\_31 (DE1), Phinally\_27 (DE2), Ribeye\_29 (DE1), RiverRaider\_29 (DE1), Rofo\_29 (DE1), Sanjuju\_27 (DE1), Saronaya\_28 (DE1), SchottB\_27 (DE1), Sedona\_29 (DE1), Shivanishola\_30 (DE1), Sitar\_29 (DE1), StorminNorm\_28 (DE1), Stultus\_27 (DE1), Tangent\_29 (DE1), Tangerine\_28 (DE1), Thing3\_28 (DE1), Tycho\_28 (DE1), Vivi2\_31 (DE1), YorkOnyx\_29 (DE1),

#### Start 54:

- Found in 1 of 618 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 532
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko\_23 (B8),

#### Start 55:

- Found in 10 of 618 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 2 of 532
- Called 30.0% of time when present
- Phage (with cluster) where this start called: Nehemiah\_23 (B5), Phelemich\_24 (B5), Reprobate\_24 (B5),

#### Start 56:

- Found in 269 of 618 ( 43.5% ) of genes in pham
- Manual Annotations of this start: 92 of 532
- Called 38.7% of time when present
- Phage (with cluster) where this start called: ABU\_24 (B1), Altwerkus\_23 (B1), Anderson\_24 (B1), Basato\_25 (B1), BatteryCK\_23 (B1), Beaglebox\_23 (B1), Burr\_23 (B1), CamL\_24 (B1), Carthage\_22 (B1), Chah\_25 (B1), Charles1\_24 (B1), Cher\_23 (B1), Chipette\_25 (B1), Chunky\_24 (B1), Chute\_23 (B1), Cobra\_24 (B1), Colbert\_24

(B1), Craff\_24 (B1), Daka\_24 (B1), Dingo\_24 (B1), Dione\_23 (B1), DolOn\_25 (B1), DonSanchon\_23 (B1), Fang\_24 (B1), Flake\_25 (B1), Gareth\_23 (B1), Giraffe\_24 (B1), Grand2040\_23 (B1), Harvey\_24 (B1), Hetaeria\_24 (B1), IsaacEli\_24 (B1), JacAttac\_24 (B1), Jesabah\_24 (B1), Jillium\_23 (B1), KLucky39\_24 (B1), Kikipoo\_24 (B1), Lasso\_24 (B1), LeeLot\_24 (B1), Lego3393\_24 (B1), Lehmann\_24 (B1), Lulumae\_23 (B1), Manad\_23 (B1), Mcshane\_23 (B1), Megamind20\_24 (B1), Mesh1\_24 (B1), MichaelPhcott\_23 (B1), MitKao\_24 (B1), Morgushi\_24 (B1), Mosaic\_23 (B1), Murdoc\_24 (B1), Nacho\_0024 (B1), Numberten\_24 (B1), OSmaximus\_24 (B1), Olak\_23 (B1), Oosterbaan\_24 (B1), Orion\_24 (B1), Orwigg\_23 (B1), PG1\_24 (B1), PallasAthena\_24 (B1), PhatCats2014\_24 (B1), PhenghisKhan\_23 (B1), Phipps\_24 (B1), PhrankReynolds\_23 (B1), Piglet\_0023 (B1), PinheadLarry\_24 (B1), Pipsqueak\_24 (B1), Podrick\_24 (B1), Prickles\_24 (B1), ProfessorX\_24 (B1), Puhltonio\_24 (B1), QueenBeane\_24 (B1), Riggan\_24 (B1), Riverton\_23 (B1), Roliet\_24 (B1), Roy17\_24 (B1), SDcharge11\_24 (B1), SallyH\_24 (B1), Scoot17C\_24 (B1), Serendipity\_24 (B1), Serpentine\_0024 (B1), ShiVal\_24 (B1), SilverBell\_24 (B1), SirBeauregard\_23 (B1), Sophia\_23 (B1), Squid\_24 (B1), Suffolk\_24 (B1), Surely\_24 (B1), TallGrassMM\_24 (B1), Telesworld\_23 (B1), Thora\_24 (B1), Timmi\_23 (B1), TomBombadil\_24 (B1), Toni\_23 (B1), TooFast2Furius\_25 (B1), Tooj\_24 (B1), UncleHowie\_24 (B1), Valjean\_24 (B1), Vaticameos\_24 (B1), Virgeve\_23 (B1), Vista\_24 (B1), Vortex\_24 (B1), Waterdiva\_24 (B1), Yoshand\_24 (B1), YouGoGlencoco\_24 (B1),

#### Start 57:

- Found in 14 of 618 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 9 of 532
- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk\_30 (DE4), Abblin\_29 (DE4), BigHunkinEater\_31 (DE4), Delrey21\_28 (DE4), DoctorFroggo\_28 (DE4), Natkenzie\_29 (DE4), Pumpkiney\_30 (DE4), Sampson\_29 (DE4), Scioto\_29 (DE4), Tardus\_30 (DE4), Verity\_28 (DE4), ViaConlectus\_29 (DE4), Zipp\_28 (DE4), Zitch\_30 (DE4),

#### Start 58:

- Found in 6 of 618 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 5 of 532
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Axumite\_21 (DR), Clawz\_52 (CP), Fresco\_21 (DR), Ligma\_21 (DR), Makar\_53 (CP), Shatter\_21 (DR),

#### Start 59:

- Found in 542 of 618 ( 87.7% ) of genes in pham
- Manual Annotations of this start: 357 of 532
- Called 78.0% of time when present
- Phage (with cluster) where this start called: 39HC\_020 (B6), 40BC\_020 (B6), Abinghost\_25 (B3), AbsoluteMadLad\_23 (B1), Acadian\_24 (B5), Adriana\_24 (B1), Aelin\_23 (B1), Ahwei\_21 (B4), Akoma\_25 (B3), AksarBAT\_21 (DR), AlanGrant\_23 (B4), Aleia\_24 (B1), Allegro\_26 (B2), AltPhacts\_24 (B1), Amo99\_53 (CP), AnClar\_22 (DR), AnarQue\_23 (DR), Andre\_24 (B1), AngelCake\_24 (B1), Antihero\_21 (B4), Antonia\_23 (B1), Aonishiki\_24 (B1), Apex\_22 (B4), Apizium\_23 (B1), Arbiter\_26 (B2), Ares\_26 (B2), Argie\_19 (W), Ashraf\_23 (B1), Athena\_26 (B3), Audrey\_25 (B3), Austelle\_23 (B4), Badfish\_24 (B1), Bae\_23 (B5), Baloo\_25 (B3), Bananafish\_26 (B2), Banjo\_23 (B1), Ben11\_24 (B3), Bernardo\_25 (B3), BiggityBass\_21 (DR), BirdsNest\_27 (B13), Bishoperium\_23 (B1), BlackStallion\_24 (B1), Blackpen\_23 (DR),

BlacksBerry\_23 (B1), Blocker23\_26 (B2), BlueHusk\_24 (B1), Bluephacebaby\_23 (B1), BobRoss2024\_20 (DR), BobbyK\_22 (B4), Boehler\_24 (B1), BoogieWoogie\_23 (B1), Boyle\_26 (B2), Briakila\_25 (B3), Brilliant\_24 (B1), BrownCNA\_23 (B4), Brownie5\_26 (B2), Buckeye\_24 (B1), CRB2\_26 (B9), CaiB\_23 (DR), Calamitous\_26 (B2), CampRoach\_24 (B1), Cannibal\_24 (B1), Casbah\_24 (B3), Caspiboi\_23 (B1), Cepens\_18 (W), ChaChing\_25 (B3), Chaelin\_23 (B1), Chalmers\_25 (B3), Chandler\_25 (B3), CharlieGBrown\_23 (B1), CharlottesWeb\_21 (DR), CheetO\_24 (B1), Chentzyk\_24 (B3), Chickadee\_26 (DE3), Childish\_23 (B1), Chorkpop\_24 (B1), ChrisnMich\_21 (B4), Chuni\_23 (B1), CloverMinnie\_23 (DR), Coffee\_26 (B2), ColdSoup\_53 (CP), Coletti\_24 (B1), Compostia\_26 (B3), Cooper\_22 (B4), Cornbread\_23 (B1), Cornobble\_23 (B1), Corofin\_25 (B3), Cosmolli16\_23 (B1), Crownjwl\_24 (B1), D12\_18 (W), DaddyDaniels\_24 (B1), Daffy\_24 (B1), Daisy\_25 (B3), Dati\_24 (B1), Deenasa\_25 (B3), DelRivs\_23 (B1), Derpp\_23 (B1), Devonte\_25 (B3), Dextert\_27 (DE3), Dice\_23 (B1), DigitDog\_24 (B5), DirtJuice\_24 (B1), Doddsville\_24 (B1), DoesntMatter\_24 (B1), DonTron\_52 (CP), Donny\_24 (B5), DuchessDung\_22 (B1), Duggie\_23 (B1), Durga\_24 (B1), EMOore\_25 (DE2), Eaglehorse\_26 (B2), EastView9101\_23 (B5), EdmundFerry\_25 (DE3), ElvisPhasley\_24 (B1), Emiris\_24 (B1), EmpTee\_24 (B1), Epah\_21 (B4), Eremos\_24 (B1), Etaye\_24 (B1), Eugenia\_24 (B1), Fanaw\_21 (B4), Faze9\_26 (B2), FelixTres\_23 (DR), FleetyMac\_23 (B1), FluffyNinja\_24 (B1), ForDig\_20 (B6), Fozzie\_23 (B1), Frankicide\_24 (B1), Frederick\_22 (B4), FremontTroll\_24 (B1), FrenchFry\_26 (B2), Freya\_23 (B1), FriarPreacher\_24 (B1), Fringe\_24 (B1), FugateOSU\_23 (B1), Funsized\_27 (B9), GTE6\_26 (DE3), Gadget\_26 (B3), GeneCoco\_24 (B1), Gervas\_25 (B3), GinPorsche\_21 (B4), Glass\_26 (B2), GlenHope\_26 (B3), Glubnar\_26 (B3), GodPhather\_19 (W), Godines\_26 (B2), Gophee\_24 (B1), GreenChile\_24 (B1), Grumio\_52 (CP), Gwennie1\_24 (B1), Gwilliam\_24 (B1), Gyarad\_0024 (B1), HSavage\_24 (B1), Haimas\_24 (B1), Haleema\_23 (B1), Halfpint\_24 (B3), Hally898\_21 (B4), Hamish\_24 (B1), Hangman\_22 (B4), Happabalu\_24 (B1), Hartsy\_24 (B1), HarveySr\_25 (B3), Hashim76\_28 (B13), Heath\_21 (B4), Heathcliff\_25 (B3), Hedgerow\_26 (B2), Hekos\_21 (B1), Held\_24 (B1), HenryJackson\_23 (B1), Hertubise\_24 (B1), HighStump\_23 (B1), Hocus\_23 (B1), HogWash\_23 (B1), Holeinone\_26 (B2), Horchata\_24 (B1), Hosp\_018 (B6), Hydro\_22 (B4), ImtiyazSitla\_23 (B1), Imvubu\_18 (B10), Inchworm\_24 (B1), Indlovu\_22 (B11), Inverness\_24 (B1), Iridessa\_24 (B1), Iridoclysis\_24 (B1), ItsyBitsy1\_26 (B2), JAMaL\_22 (B4), JDog\_23 (B1), Jackstina\_23 (B3), JaguarMi\_22 (B4), JakeO\_23 (B1), JangoPhett\_24 (B1), Jeon\_18 (W), Jiminy\_23 (B1), Jiraiya\_23 (B1), Jolie1\_020 (B6), Jollymon\_52 (CP), JoyceMaria\_22 (B4), Kahve\_23 (B1), Kailash\_24 (B1), Kaleb\_26 (B2), Kamiyu\_25 (B3), KarasumaRum\_26 (B5), Karn\_23 (B1), Katniss\_24 (B1), KayaCho\_20 (B6), Keitherie\_24 (B1), Khan1\_24 (B1), Kheth\_26 (B2), Kimbrough\_24 (B1), KingVeVeVe\_24 (B1), KingstonB\_53 (CP), KlimbOn\_24 (B1), Kloppinator\_24 (B1), Knocker\_26 (B9), Kolhan\_26 (B2), Kronus\_24 (B3), Kwadwo\_23 (B1), Kwekel\_26 (DE3), Kwksand96\_23 (B1), Labeouficaum\_23 (B1), Lambano\_21 (B4), Lars\_26 (B2), Larson\_25 (B1), LasagnaCat\_24 (B1), Laurie\_26 (B2), Legolas\_23 (B1), LeiMonet\_24 (B1), LemonSlice\_24 (B1), Lephleur\_26 (B2), LestyG\_25 (B3), LilMcDreamy\_21 (B12), LilSmirk\_26 (B2), LittleDigger\_21 (B4), LittleMinkey\_29 (B13), LittleMunchkin\_23 (DR), LizLemon\_26 (B2), Lolalove\_22 (B4), Longacauda\_23 (B1), LostAndPhound\_23 (B1), LuckyMarjie\_23 (B1), Lulwa\_24 (B1), Lumine\_23 (B1), MRabcd\_23 (B1), Mag7\_23 (B1), Magic8\_24 (B1), Magpie\_21 (B4), MakoManhole\_23 (DR), Mana\_23 (B1), Mariokart\_21 (DR), Marley1013\_25 (B3), Marlia\_25 (B3), Maru\_23 (B1), Maskar\_23 (B1), MasterPo\_26 (B2), Matalotodo\_24 (B1), Mecca\_23 (B1), Megabear\_18 (W), Megatron\_24 (B1), Melc17\_24 (B1), MelsMeow\_23 (B1), Mesmerelda\_23 (B1), Mikota\_24 (B1), MiniBoss\_24 (B1), Mithril\_22 (B4), MmasiCarm\_25 (B3), Mortcellus\_24 (B3), Morty007\_25 (B3),

Morty\_24 (B1), MossRose\_23 (DR), MrPhizzler\_24 (B1), Mudslide\_22 (B4), Mulan\_23 (B1), Mulaychimus\_25 (B3), Mutante\_23 (B1), Mysterious\_24 (B5), NHagos\_21 (DR), Nanao\_21 (B4), Nangang\_24 (B5), Nathan\_24 (B1), Neos5\_25 (B3), Newman\_24 (B1), Nicole21\_24 (B1), Nigel\_20 (B4), Nozo\_25 (B3), Nyala\_23 (B1), Obutu\_25 (B3), Oline\_23 (B1), Olive\_24 (B1), OliverWalter\_24 (B1), Olivio\_24 (B3), Omniscient\_24 (B1), OneBrain\_24 (B1), Opia\_26 (B2), OrangeOswald\_25 (B3), Orfeu\_23 (B1), PR\_18 (W), Pacifista\_23 (B1), PenguinLover67\_26 (B9), Phaedrus\_23 (B3), Phamished\_24 (B1), Phantasmagoria\_26 (B2), Phareon\_24 (B1), PhatLouie\_24 (B1), Phauci\_20 (DE2), Phayeta\_25 (B3), Pherdinand\_24 (B1), Phergie\_23 (B1), Philly\_24 (B3), Phleuron\_23 (B1), Phlyer\_25 (B3), PhrodoBaggins\_23 (B1), Phunky\_24 (B1), Pine5\_24 (singleton), Pinkman\_23 (B1), Pipefish\_25 (B3), Placalicious\_23 (B1), Plata\_24 (B1), PImatters\_24 (B1), Pops\_24 (B1), Poster\_21 (B4), Potter\_23 (B1), PrinceCharming\_26 (B2), Prince\_22 (B4), Purplicious\_51 (CP), QueenPie\_21 (B4), Quesadilla\_25 (B9), Quisquillae\_24 (B1), Qyrzula\_24 (B2), RagingRooster\_25 (B3), RawrgerThat\_22 (B4), Reccee\_25 (B5), RedMaple\_23 (B1), RedRaider89\_25 (B1), Renkei\_21 (B4), Rhinoforte\_26 (B2), Rich\_23 (B5), Ricotta\_23 (B1), Rimu\_24 (B1), Rinke\_27 (B9), Rita130\_24 (B5), Rita1961\_25 (B3), RoadKill\_24 (DE3), Robyn\_23 (B1), RomaT\_25 (B3), Roscoe\_25 (B1), Rosebush\_26 (B2), Sabella\_26 (B2), Saguaro\_25 (B7), Samaymay\_24 (B1), SassyCat97\_23 (B1), Schadenfreude\_23 (B1), Schueller\_23 (B1), Scrick\_24 (B1), Selr12\_24 (B1), Serendipitous\_23 (B5), ShadowBud\_24 (B1), Sheila\_24 (B1), Shenandoah\_25 (B3), Shenyu\_24 (B5), Sigman\_24 (B1), Simielle\_23 (B1), SirJeffery\_24 (B5), Sisko\_21 (DR), Skippy\_24 (B1), Slatt\_24 (B1), SlippinJimmy\_25 (B3), Soile\_24 (B1), Solosis\_23 (B1), Soos\_48 (CP), Soto\_24 (B1), Sour\_25 (DR), Spartan300\_24 (B1), Squiggle\_24 (B1), Stillion\_52 (CP), Sting\_51 (CP), Stinger\_20 (B4), StinkyVeggy\_26 (B5), Struggle\_23 (B1), SwainyDoc\_25 (B3), Swiphy\_24 (B1), Swish\_24 (B1), SynergyX\_25 (B3), TA17A\_27 (B2), Taptic\_18 (W), ThreeOh3D2\_24 (B1), Thunderbird\_23 (B1), Tiamoceli\_27 (DE3), Tincidunt\_solum\_27 (B2), TinyTerror\_25 (B3), Tomlarah\_24 (B1), Tonitrus\_39 (singleton), TraderJ\_23 (DR), Tres\_26 (B2), Triad\_24 (B1), True\_23 (B1), Trypo\_24 (B1), Twonlo\_24 (DE3), Tydolla\_25 (B3), TyrionL\_23 (B1), UAch1\_24 (B1), Usavi\_24 (B1), Vaishali24\_23 (B1), Vic9\_00026 (B2), Vincenzo\_23 (B4), VioletZ\_22 (B4), Virapocalypse\_24 (B1), Vivaldi\_24 (B1), Waleliano\_22 (B4), Wallhey\_23 (B1), Weher20\_24 (B1), West99\_26 (B2), Windsor\_23 (B1), Wooper\_23 (DR), Xavier\_23 (B1), Xincheng\_21 (B4), Yago84\_21 (DR), Yahalom\_25 (B3), Yeshua\_23 (DR), Yinz\_25 (B3), Zaidler\_25 (B1), Zelda\_24 (B1), Zenteno07\_28 (B13), Zonia\_24 (B1),

Start 60:

- Found in 1 of 618 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 532
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evaa\_22 (DR),

Start 61:

- Found in 1 of 618 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 532
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Coldpizza\_24 (DR),

Start 64:

- Found in 479 of 618 ( 77.5% ) of genes in pham
- Manual Annotations of this start: 2 of 532
- Called 0.4% of time when present

- Phage (with cluster) where this start called: Lopsy\_23 (B1), Zemanar\_23 (B4),

Start 65:

- Found in 311 of 618 ( 50.3% ) of genes in pham
- Manual Annotations of this start: 1 of 532
- Called 0.3% of time when present
- Phage (with cluster) where this start called: Veritas\_23 (B1),

### **Summary by clusters:**

There are 21 clusters represented in this pham: B8, singleton, W, B10, DE1, DE2, DE3, DE4, B4, B5, B6, B7, B11, B1, B2, B3, B12, CP, DR, B9, B13,

Info for manual annotations of cluster B1:

- Start number 56 was manually annotated 92 times for cluster B1.
- Start number 59 was manually annotated 187 times for cluster B1.
- Start number 64 was manually annotated 1 time for cluster B1.
- Start number 65 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster B10:

- Start number 59 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 59 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 59 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 59 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 59 was manually annotated 37 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 59 was manually annotated 50 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 59 was manually annotated 24 times for cluster B4.
- Start number 64 was manually annotated 1 time for cluster B4.

Info for manual annotations of cluster B5:

- Start number 52 was manually annotated 1 time for cluster B5.
- Start number 55 was manually annotated 2 times for cluster B5.
- Start number 59 was manually annotated 7 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 59 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster B7:

- Start number 59 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 54 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 59 was manually annotated 6 times for cluster B9.

Info for manual annotations of cluster CP:

- Start number 58 was manually annotated 1 time for cluster CP.
- Start number 59 was manually annotated 4 times for cluster CP.

Info for manual annotations of cluster DE1:

- Start number 53 was manually annotated 53 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 53 was manually annotated 7 times for cluster DE2.
- Start number 59 was manually annotated 2 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 59 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 57 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DR:

- Start number 58 was manually annotated 4 times for cluster DR.
- Start number 59 was manually annotated 15 times for cluster DR.
- Start number 60 was manually annotated 1 time for cluster DR.
- Start number 61 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster W:

- Start number 59 was manually annotated 8 times for cluster W.

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

Gene: 39HC\_020 Start: 17537, Stop: 17860, Start Num: 59

Candidate Starts for 39HC\_020:

(Start: 59 @17537 has 357 MA's), (73, 17600), (77, 17627), (82, 17660), (91, 17699),

Gene: 40BC\_020 Start: 17537, Stop: 17860, Start Num: 59

Candidate Starts for 40BC\_020:

(Start: 59 @17537 has 357 MA's), (73, 17600), (77, 17627), (82, 17660), (91, 17699),

Gene: ABU\_24 Start: 18329, Stop: 18664, Start Num: 56

Candidate Starts for ABU\_24:

(Start: 56 @18329 has 92 MA's), (Start: 59 @18335 has 357 MA's), (Start: 64 @18344 has 2 MA's), (Start: 65 @18347 has 1 MA's), (75, 18404), (82, 18455), (107, 18572), (116, 18629),

Gene: APunk\_30 Start: 21958, Stop: 22368, Start Num: 57

Candidate Starts for APunk\_30:

(Start: 57 @21958 has 9 MA's), (Start: 64 @21970 has 2 MA's), (72, 22018), (73, 22021), (77, 22045), (81, 22075), (94, 22132), (102, 22192),

Gene: Abblin\_29 Start: 22570, Stop: 22980, Start Num: 57

Candidate Starts for Abblin\_29:

(Start: 57 @22570 has 9 MA's), (Start: 64 @22582 has 2 MA's), (72, 22630), (73, 22633), (77, 22657), (81, 22687), (94, 22744), (102, 22804),

Gene: Abinghost\_25 Start: 19008, Stop: 19379, Start Num: 59

Candidate Starts for Abinghost\_25:

(34, 18933), (37, 18942), (Start: 59 @19008 has 357 MA's), (Start: 64 @19023 has 2 MA's), (75, 19080), (76, 19086), (80, 19125), (83, 19134),

Gene: AbsoluteMadLad\_23 Start: 18336, Stop: 18665, Start Num: 59

Candidate Starts for AbsoluteMadLad\_23:

(Start: 56 @18330 has 92 MA's), (Start: 59 @18336 has 357 MA's), (Start: 64 @18345 has 2 MA's), (Start: 65 @18348 has 1 MA's), (75, 18405), (82, 18456), (107, 18573), (116, 18630),

Gene: Acadian\_24 Start: 19057, Stop: 19389, Start Num: 59

Candidate Starts for Acadian\_24:

(8, 18679), (12, 18721), (17, 18787), (23, 18832), (30, 18925), (45, 19015), (Start: 52 @19042 has 1 MA's), (Start: 59 @19057 has 357 MA's), (75, 19126), (81, 19174), (83, 19180),

Gene: Adriana\_24 Start: 18338, Stop: 18667, Start Num: 59

Candidate Starts for Adriana\_24:

(Start: 56 @18332 has 92 MA's), (Start: 59 @18338 has 357 MA's), (Start: 64 @18347 has 2 MA's), (Start: 65 @18350 has 1 MA's), (75, 18407), (82, 18458), (107, 18575), (116, 18632),

Gene: Aelin\_23 Start: 17901, Stop: 18230, Start Num: 59

Candidate Starts for Aelin\_23:

(Start: 56 @17895 has 92 MA's), (Start: 59 @17901 has 357 MA's), (Start: 64 @17910 has 2 MA's), (Start: 65 @17913 has 1 MA's), (75, 17970), (82, 18021), (107, 18138), (116, 18195),

Gene: Affeca\_27 Start: 22464, Stop: 22871, Start Num: 53

Candidate Starts for Affeca\_27:

(Start: 53 @22464 has 60 MA's), (Start: 64 @22485 has 2 MA's), (80, 22587), (99, 22662), (109, 22749), (119, 22800),

Gene: Ahwei\_21 Start: 17944, Stop: 18300, Start Num: 59

Candidate Starts for Ahwei\_21:

(37, 17878), (41, 17893), (Start: 59 @17944 has 357 MA's), (Start: 64 @17953 has 2 MA's), (75, 18016), (77, 18034), (80, 18061), (81, 18064), (83, 18070),

Gene: Ailee\_27 Start: 23173, Stop: 23580, Start Num: 53

Candidate Starts for Ailee\_27:

(Start: 53 @23173 has 60 MA's), (80, 23296), (90, 23332), (99, 23371), (109, 23458), (119, 23509),

Gene: Akoma\_25 Start: 19006, Stop: 19380, Start Num: 59

Candidate Starts for Akoma\_25:

(34, 18931), (37, 18940), (Start: 59 @19006 has 357 MA's), (Start: 64 @19021 has 2 MA's), (75, 19078), (76, 19084), (80, 19123), (83, 19132),

Gene: AksarBAT\_21 Start: 16802, Stop: 17146, Start Num: 59

Candidate Starts for AksarBAT\_21:

(Start: 59 @16802 has 357 MA's), (Start: 64 @16817 has 2 MA's), (75, 16880), (76, 16886), (77, 16898),

Gene: AlanGrant\_23 Start: 19743, Stop: 20084, Start Num: 59

Candidate Starts for AlanGrant\_23:

(5, 19341), (10, 19392), (43, 19698), (Start: 59 @19743 has 357 MA's), (73, 19806), (75, 19812), (77, 19830), (80, 19857), (83, 19866), (98, 19938),

Gene: Aleia\_24 Start: 17915, Stop: 18244, Start Num: 59

Candidate Starts for Aleia\_24:

(Start: 59 @17915 has 357 MA's), (Start: 64 @17924 has 2 MA's), (Start: 65 @17927 has 1 MA's), (75, 17984), (82, 18035), (107, 18152), (116, 18209),

Gene: Ali17\_25 Start: 20316, Stop: 20762, Start Num: 53

Candidate Starts for Ali17\_25:

(Start: 53 @20316 has 60 MA's), (Start: 59 @20328 has 357 MA's), (Start: 64 @20337 has 2 MA's), (70, 20370), (73, 20388), (80, 20439), (93, 20508), (103, 20586),

Gene: Allegro\_26 Start: 20480, Stop: 20836, Start Num: 59

Candidate Starts for Allegro\_26:

(15, 20207), (20, 20255), (28, 20351), (Start: 59 @20480 has 357 MA's), (83, 20600), (92, 20669), (96, 20690),

Gene: AltPhacts\_24 Start: 18330, Stop: 18659, Start Num: 59

Candidate Starts for AltPhacts\_24:

(Start: 56 @18324 has 92 MA's), (Start: 59 @18330 has 357 MA's), (Start: 64 @18339 has 2 MA's), (Start: 65 @18342 has 1 MA's), (75, 18399), (82, 18450), (107, 18567), (116, 18624),

Gene: Altwerkus\_23 Start: 18024, Stop: 18359, Start Num: 56

Candidate Starts for Altwerkus\_23:

(Start: 56 @18024 has 92 MA's), (Start: 59 @18030 has 357 MA's), (Start: 64 @18039 has 2 MA's), (Start: 65 @18042 has 1 MA's), (75, 18099), (82, 18150), (107, 18267), (116, 18324),

Gene: Amo99\_53 Start: 29182, Stop: 29535, Start Num: 59

Candidate Starts for Amo99\_53:

(Start: 59 @29182 has 357 MA's), (73, 29242),

Gene: AnClar\_22 Start: 19109, Stop: 19438, Start Num: 59

Candidate Starts for AnClar\_22:

(Start: 59 @19109 has 357 MA's), (74, 19181), (76, 19190), (111, 19406),

Gene: AnarQue\_23 Start: 18280, Stop: 18621, Start Num: 59

Candidate Starts for AnarQue\_23:

(Start: 59 @18280 has 357 MA's), (Start: 64 @18295 has 2 MA's), (75, 18358), (82, 18409), (105, 18544), (114, 18604),

Gene: Anderson\_24 Start: 18322, Stop: 18657, Start Num: 56

Candidate Starts for Anderson\_24:

(Start: 56 @18322 has 92 MA's), (Start: 59 @18328 has 357 MA's), (Start: 64 @18337 has 2 MA's), (Start: 65 @18340 has 1 MA's), (75, 18397), (82, 18448), (107, 18565), (116, 18622),

Gene: Andre\_24 Start: 18326, Stop: 18655, Start Num: 59

Candidate Starts for Andre\_24:

(Start: 56 @18320 has 92 MA's), (Start: 59 @18326 has 357 MA's), (Start: 64 @18335 has 2 MA's), (Start: 65 @18338 has 1 MA's), (75, 18395), (82, 18446), (107, 18563), (116, 18620),

Gene: AngelCake\_24 Start: 18341, Stop: 18670, Start Num: 59

Candidate Starts for AngelCake\_24:

(Start: 56 @18335 has 92 MA's), (Start: 59 @18341 has 357 MA's), (Start: 64 @18350 has 2 MA's),  
(Start: 65 @18353 has 1 MA's), (75, 18410), (82, 18461), (107, 18578), (116, 18635),

Gene: Angelicage\_27 Start: 22881, Stop: 23288, Start Num: 53

Candidate Starts for Angelicage\_27:

(Start: 53 @22881 has 60 MA's), (Start: 64 @22902 has 2 MA's), (80, 23004), (99, 23079), (109,  
23166), (119, 23217),

Gene: Antihero\_21 Start: 17944, Stop: 18300, Start Num: 59

Candidate Starts for Antihero\_21:

(37, 17878), (41, 17893), (Start: 59 @17944 has 357 MA's), (Start: 64 @17953 has 2 MA's), (75,  
18016), (77, 18034), (80, 18061), (81, 18064), (83, 18070),

Gene: Antonia\_23 Start: 17901, Stop: 18230, Start Num: 59

Candidate Starts for Antonia\_23:

(Start: 56 @17895 has 92 MA's), (Start: 59 @17901 has 357 MA's), (Start: 64 @17910 has 2 MA's),  
(Start: 65 @17913 has 1 MA's), (75, 17970), (82, 18021), (107, 18138), (116, 18195),

Gene: Aonishiki\_24 Start: 18356, Stop: 18685, Start Num: 59

Candidate Starts for Aonishiki\_24:

(Start: 56 @18350 has 92 MA's), (Start: 59 @18356 has 357 MA's), (Start: 64 @18365 has 2 MA's),  
(Start: 65 @18368 has 1 MA's), (75, 18425), (82, 18476), (107, 18593), (116, 18650),

Gene: Apex\_22 Start: 19157, Stop: 19513, Start Num: 59

Candidate Starts for Apex\_22:

(31, 19022), (37, 19091), (41, 19106), (46, 19121), (Start: 59 @19157 has 357 MA's), (Start: 64  
@19166 has 2 MA's), (75, 19229), (77, 19247), (80, 19274), (81, 19277), (83, 19283),

Gene: Apizium\_23 Start: 18071, Stop: 18418, Start Num: 59

Candidate Starts for Apizium\_23:

(Start: 56 @18065 has 92 MA's), (Start: 59 @18071 has 357 MA's), (Start: 64 @18080 has 2 MA's),  
(Start: 65 @18083 has 1 MA's), (75, 18140), (82, 18191), (107, 18326), (116, 18383),

Gene: Arbiter\_26 Start: 20568, Stop: 20921, Start Num: 59

Candidate Starts for Arbiter\_26:

(20, 20343), (28, 20439), (Start: 59 @20568 has 357 MA's), (83, 20688), (92, 20754), (96, 20775),

Gene: Ares\_26 Start: 20484, Stop: 20837, Start Num: 59

Candidate Starts for Ares\_26:

(15, 20211), (20, 20259), (28, 20355), (Start: 59 @20484 has 357 MA's), (83, 20604), (92, 20670), (96,  
20691),

Gene: Argie\_19 Start: 18094, Stop: 18480, Start Num: 59

Candidate Starts for Argie\_19:

(39, 18040), (Start: 59 @18094 has 357 MA's), (62, 18100), (Start: 64 @18106 has 2 MA's), (101,  
18382), (114, 18466),

Gene: Ashertheman\_29 Start: 21770, Stop: 22165, Start Num: 53

Candidate Starts for Ashertheman\_29:

(Start: 53 @21770 has 60 MA's), (70, 21818), (73, 21836), (80, 21887), (100, 21980), (109, 22049), (121, 22124),

Gene: Ashraf\_23 Start: 17893, Stop: 18222, Start Num: 59

Candidate Starts for Ashraf\_23:

(Start: 59 @17893 has 357 MA's), (Start: 64 @17902 has 2 MA's), (Start: 65 @17905 has 1 MA's), (75, 17962), (82, 18013), (107, 18130), (116, 18187),

Gene: Athena\_26 Start: 19771, Stop: 20142, Start Num: 59

Candidate Starts for Athena\_26:

(34, 19696), (37, 19705), (Start: 59 @19771 has 357 MA's), (Start: 64 @19786 has 2 MA's), (75, 19843), (76, 19849), (80, 19888), (83, 19897),

Gene: Audrey\_25 Start: 19008, Stop: 19379, Start Num: 59

Candidate Starts for Audrey\_25:

(34, 18933), (37, 18942), (Start: 59 @19008 has 357 MA's), (Start: 64 @19023 has 2 MA's), (75, 19080), (76, 19086), (80, 19125), (83, 19134),

Gene: Austelle\_23 Start: 19613, Stop: 19969, Start Num: 59

Candidate Starts for Austelle\_23:

(31, 19478), (37, 19547), (41, 19562), (46, 19577), (Start: 59 @19613 has 357 MA's), (Start: 64 @19622 has 2 MA's), (75, 19685), (77, 19703), (80, 19730), (81, 19733), (83, 19739),

Gene: Axumite\_21 Start: 16902, Stop: 17228, Start Num: 58

Candidate Starts for Axumite\_21:

(9, 16536), (11, 16554), (16, 16620), (20, 16665), (25, 16692), (28, 16758), (Start: 58 @16902 has 5 MA's), (77, 16995), (80, 17022), (111, 17196),

Gene: Baddon\_28 Start: 22582, Stop: 22965, Start Num: 53

Candidate Starts for Baddon\_28:

(Start: 53 @22582 has 60 MA's), (70, 22630), (73, 22648), (80, 22699), (109, 22861), (121, 22936),

Gene: Badfish\_24 Start: 18360, Stop: 18689, Start Num: 59

Candidate Starts for Badfish\_24:

(Start: 56 @18354 has 92 MA's), (Start: 59 @18360 has 357 MA's), (Start: 64 @18369 has 2 MA's), (Start: 65 @18372 has 1 MA's), (75, 18429), (82, 18480), (107, 18597), (116, 18654),

Gene: Bae\_23 Start: 18813, Stop: 19145, Start Num: 59

Candidate Starts for Bae\_23:

(Start: 56 @18807 has 92 MA's), (Start: 59 @18813 has 357 MA's), (81, 18930), (83, 18936),

Gene: Baloo\_25 Start: 19005, Stop: 19379, Start Num: 59

Candidate Starts for Baloo\_25:

(34, 18930), (37, 18939), (Start: 59 @19005 has 357 MA's), (Start: 64 @19020 has 2 MA's), (75, 19077), (76, 19083), (80, 19122), (83, 19131),

Gene: Bananafish\_26 Start: 20477, Stop: 20833, Start Num: 59

Candidate Starts for Bananafish\_26:

(15, 20204), (20, 20252), (28, 20348), (Start: 59 @20477 has 357 MA's), (83, 20597), (92, 20666), (96, 20687),

Gene: Banjo\_23 Start: 18037, Stop: 18366, Start Num: 59

Candidate Starts for Banjo\_23:

(Start: 56 @18031 has 92 MA's), (Start: 59 @18037 has 357 MA's), (Start: 64 @18046 has 2 MA's), (Start: 65 @18049 has 1 MA's), (75, 18106), (82, 18157), (107, 18274), (116, 18331),

Gene: Barsten\_29 Start: 22305, Stop: 22712, Start Num: 53

Candidate Starts for Barsten\_29:

(Start: 53 @22305 has 60 MA's), (Start: 64 @22326 has 2 MA's), (80, 22428), (99, 22503), (109, 22590), (119, 22641),

Gene: Basato\_25 Start: 18556, Stop: 18891, Start Num: 56

Candidate Starts for Basato\_25:

(Start: 56 @18556 has 92 MA's), (Start: 59 @18562 has 357 MA's), (Start: 64 @18571 has 2 MA's), (Start: 65 @18574 has 1 MA's), (75, 18631), (82, 18682), (107, 18799), (116, 18856),

Gene: BatteryCK\_23 Start: 17888, Stop: 18244, Start Num: 56

Candidate Starts for BatteryCK\_23:

(Start: 56 @17888 has 92 MA's), (Start: 59 @17894 has 357 MA's), (Start: 64 @17903 has 2 MA's), (Start: 65 @17906 has 1 MA's), (75, 17963), (82, 18014), (107, 18149), (116, 18206),

Gene: Baumdotcom\_28 Start: 21385, Stop: 21780, Start Num: 53

Candidate Starts for Baumdotcom\_28:

(Start: 53 @21385 has 60 MA's), (70, 21433), (73, 21451), (80, 21502), (100, 21595), (109, 21664), (121, 21739),

Gene: Beaglebox\_23 Start: 18051, Stop: 18386, Start Num: 56

Candidate Starts for Beaglebox\_23:

(Start: 56 @18051 has 92 MA's), (Start: 59 @18057 has 357 MA's), (Start: 64 @18066 has 2 MA's), (Start: 65 @18069 has 1 MA's), (75, 18126), (82, 18177), (107, 18294), (116, 18351),

Gene: Belphegor\_27 Start: 21865, Stop: 22314, Start Num: 53

Candidate Starts for Belphegor\_27:

(Start: 53 @21865 has 60 MA's), (Start: 59 @21877 has 357 MA's), (70, 21919), (93, 22066),

Gene: Ben11\_24 Start: 18830, Stop: 19201, Start Num: 59

Candidate Starts for Ben11\_24:

(34, 18755), (37, 18764), (Start: 59 @18830 has 357 MA's), (Start: 64 @18845 has 2 MA's), (75, 18902), (76, 18908), (80, 18947), (83, 18956),

Gene: Bernardo\_25 Start: 19005, Stop: 19379, Start Num: 59

Candidate Starts for Bernardo\_25:

(34, 18930), (37, 18939), (Start: 59 @19005 has 357 MA's), (Start: 64 @19020 has 2 MA's), (75, 19077), (76, 19083), (80, 19122), (83, 19131),

Gene: Bibwit\_28 Start: 22492, Stop: 22899, Start Num: 53

Candidate Starts for Bibwit\_28:

(Start: 53 @22492 has 60 MA's), (Start: 64 @22513 has 2 MA's), (80, 22615), (99, 22690), (109, 22777), (121, 22852),

Gene: BigHunkinEater\_31 Start: 21741, Stop: 22151, Start Num: 57

Candidate Starts for BigHunkinEater\_31:

(50, 21726), (Start: 57 @21741 has 9 MA's), (Start: 64 @21753 has 2 MA's), (72, 21801), (73, 21804), (77, 21828), (81, 21858), (94, 21915), (102, 21975),

Gene: BiggityBass\_21 Start: 19197, Stop: 19523, Start Num: 59

Candidate Starts for BiggityBass\_21:  
(Start: 59 @19197 has 357 MA's), (74, 19266), (92, 19368), (111, 19491),

Gene: BirdsNest\_27 Start: 18407, Stop: 18733, Start Num: 59  
Candidate Starts for BirdsNest\_27:  
(36, 18341), (40, 18356), (Start: 59 @18407 has 357 MA's), (83, 18530), (107, 18644),

Gene: Bishoperium\_23 Start: 18043, Stop: 18372, Start Num: 59  
Candidate Starts for Bishoperium\_23:  
(Start: 56 @18037 has 92 MA's), (Start: 59 @18043 has 357 MA's), (Start: 64 @18052 has 2 MA's),  
(Start: 65 @18055 has 1 MA's), (75, 18112), (82, 18163), (107, 18280), (116, 18337),

Gene: Bizzy\_29 Start: 21729, Stop: 22112, Start Num: 53  
Candidate Starts for Bizzy\_29:  
(Start: 53 @21729 has 60 MA's), (70, 21777), (73, 21795), (80, 21846), (109, 22008), (121, 22083),

Gene: BlackStallion\_24 Start: 18348, Stop: 18677, Start Num: 59  
Candidate Starts for BlackStallion\_24:  
(Start: 56 @18342 has 92 MA's), (Start: 59 @18348 has 357 MA's), (Start: 64 @18357 has 2 MA's),  
(Start: 65 @18360 has 1 MA's), (75, 18417), (82, 18468), (107, 18585), (116, 18642),

Gene: Blackpen\_23 Start: 17698, Stop: 18039, Start Num: 59  
Candidate Starts for Blackpen\_23:  
(Start: 59 @17698 has 357 MA's), (Start: 64 @17713 has 2 MA's), (75, 17776), (77, 17794), (82,  
17827), (105, 17962), (114, 18022),

Gene: BlacksBerry\_23 Start: 18053, Stop: 18382, Start Num: 59  
Candidate Starts for BlacksBerry\_23:  
(Start: 59 @18053 has 357 MA's), (Start: 64 @18062 has 2 MA's), (Start: 65 @18065 has 1 MA's), (75,  
18122), (82, 18173), (107, 18290), (116, 18347),

Gene: Blocker23\_26 Start: 20601, Stop: 20954, Start Num: 59  
Candidate Starts for Blocker23\_26:  
(15, 20328), (20, 20376), (28, 20472), (Start: 59 @20601 has 357 MA's), (83, 20721), (92, 20787), (96,  
20808),

Gene: BlueHusk\_24 Start: 17844, Stop: 18173, Start Num: 59  
Candidate Starts for BlueHusk\_24:  
(Start: 56 @17838 has 92 MA's), (Start: 59 @17844 has 357 MA's), (Start: 64 @17853 has 2 MA's),  
(Start: 65 @17856 has 1 MA's), (75, 17913), (82, 17964), (107, 18081), (116, 18138),

Gene: Bluephacebaby\_23 Start: 18043, Stop: 18372, Start Num: 59  
Candidate Starts for Bluephacebaby\_23:  
(Start: 56 @18037 has 92 MA's), (Start: 59 @18043 has 357 MA's), (Start: 64 @18052 has 2 MA's),  
(Start: 65 @18055 has 1 MA's), (75, 18112), (82, 18163), (107, 18280), (116, 18337),

Gene: BobBob\_26 Start: 21770, Stop: 22177, Start Num: 53  
Candidate Starts for BobBob\_26:  
(Start: 53 @21770 has 60 MA's), (Start: 64 @21791 has 2 MA's), (80, 21893), (99, 21968), (109,  
22055), (119, 22106),

Gene: BobRoss2024\_20 Start: 16669, Stop: 16983, Start Num: 59  
Candidate Starts for BobRoss2024\_20:

(49, 16642), (Start: 59 @16669 has 357 MA's), (77, 16759), (80, 16786), (83, 16795),

Gene: BobbyK\_22 Start: 18976, Stop: 19332, Start Num: 59

Candidate Starts for BobbyK\_22:

(31, 18841), (37, 18910), (41, 18925), (46, 18940), (Start: 59 @18976 has 357 MA's), (Start: 64 @18985 has 2 MA's), (75, 19048), (77, 19066), (80, 19093), (81, 19096), (83, 19102),

Gene: Boehler\_24 Start: 18353, Stop: 18682, Start Num: 59

Candidate Starts for Boehler\_24:

(Start: 56 @18347 has 92 MA's), (Start: 59 @18353 has 357 MA's), (Start: 64 @18362 has 2 MA's), (Start: 65 @18365 has 1 MA's), (75, 18422), (82, 18473), (107, 18590), (116, 18647),

Gene: BoogieWoogie\_23 Start: 18030, Stop: 18359, Start Num: 59

Candidate Starts for BoogieWoogie\_23:

(Start: 56 @18024 has 92 MA's), (Start: 59 @18030 has 357 MA's), (Start: 64 @18039 has 2 MA's), (Start: 65 @18042 has 1 MA's), (75, 18099), (82, 18150), (107, 18267), (116, 18324),

Gene: Boyle\_26 Start: 20602, Stop: 20955, Start Num: 59

Candidate Starts for Boyle\_26:

(15, 20329), (20, 20377), (28, 20473), (Start: 59 @20602 has 357 MA's), (83, 20722), (92, 20788), (96, 20809),

Gene: Brandonk123\_30 Start: 22839, Stop: 23246, Start Num: 53

Candidate Starts for Brandonk123\_30:

(Start: 53 @22839 has 60 MA's), (Start: 64 @22860 has 2 MA's), (80, 22962), (99, 23037), (109, 23124), (119, 23175),

Gene: Briakila\_25 Start: 19773, Stop: 20144, Start Num: 59

Candidate Starts for Briakila\_25:

(34, 19698), (37, 19707), (Start: 59 @19773 has 357 MA's), (Start: 64 @19788 has 2 MA's), (75, 19845), (76, 19851), (80, 19890), (83, 19899),

Gene: Brilliant\_24 Start: 18049, Stop: 18378, Start Num: 59

Candidate Starts for Brilliant\_24:

(Start: 59 @18049 has 357 MA's), (Start: 64 @18058 has 2 MA's), (Start: 65 @18061 has 1 MA's), (75, 18118), (82, 18169), (107, 18286), (116, 18343),

Gene: BrownCNA\_23 Start: 19228, Stop: 19584, Start Num: 59

Candidate Starts for BrownCNA\_23:

(37, 19162), (41, 19177), (46, 19192), (Start: 59 @19228 has 357 MA's), (Start: 64 @19237 has 2 MA's), (75, 19300), (77, 19318), (80, 19345), (81, 19348), (83, 19354),

Gene: Brownie5\_26 Start: 20601, Stop: 20954, Start Num: 59

Candidate Starts for Brownie5\_26:

(15, 20328), (20, 20376), (28, 20472), (Start: 59 @20601 has 357 MA's), (83, 20721), (92, 20787), (96, 20808),

Gene: Buckeye\_24 Start: 18367, Stop: 18696, Start Num: 59

Candidate Starts for Buckeye\_24:

(Start: 56 @18361 has 92 MA's), (Start: 59 @18367 has 357 MA's), (Start: 64 @18376 has 2 MA's), (Start: 65 @18379 has 1 MA's), (75, 18436), (82, 18487), (107, 18604), (116, 18661),

Gene: Burr\_23 Start: 18036, Stop: 18371, Start Num: 56

Candidate Starts for Burr\_23:

(Start: 56 @18036 has 92 MA's), (Start: 59 @18042 has 357 MA's), (Start: 64 @18051 has 2 MA's),  
(Start: 65 @18054 has 1 MA's), (75, 18111), (82, 18162), (107, 18279), (116, 18336),

Gene: CRB2\_26 Start: 20719, Stop: 21048, Start Num: 59

Candidate Starts for CRB2\_26:

(1, 20266), (8, 20335), (17, 20443), (23, 20488), (Start: 59 @20719 has 357 MA's), (77, 20806), (82,  
20839), (83, 20842), (108, 20962), (115, 21010),

Gene: CaiB\_23 Start: 18266, Stop: 18607, Start Num: 59

Candidate Starts for CaiB\_23:

(Start: 59 @18266 has 357 MA's), (Start: 64 @18281 has 2 MA's), (75, 18344), (77, 18362), (82,  
18395), (114, 18590),

Gene: Calamitous\_26 Start: 20481, Stop: 20834, Start Num: 59

Candidate Starts for Calamitous\_26:

(15, 20208), (20, 20256), (28, 20352), (Start: 59 @20481 has 357 MA's), (83, 20601), (92, 20667), (96,  
20688),

Gene: CamL\_24 Start: 18335, Stop: 18670, Start Num: 56

Candidate Starts for CamL\_24:

(Start: 56 @18335 has 92 MA's), (Start: 59 @18341 has 357 MA's), (Start: 64 @18350 has 2 MA's),  
(Start: 65 @18353 has 1 MA's), (75, 18410), (82, 18461), (107, 18578), (116, 18635),

Gene: CampRoach\_24 Start: 18334, Stop: 18663, Start Num: 59

Candidate Starts for CampRoach\_24:

(Start: 56 @18328 has 92 MA's), (Start: 59 @18334 has 357 MA's), (Start: 64 @18343 has 2 MA's),  
(Start: 65 @18346 has 1 MA's), (75, 18403), (82, 18454), (107, 18571), (116, 18628),

Gene: Cannibal\_24 Start: 18327, Stop: 18656, Start Num: 59

Candidate Starts for Cannibal\_24:

(Start: 56 @18321 has 92 MA's), (Start: 59 @18327 has 357 MA's), (Start: 64 @18336 has 2 MA's),  
(Start: 65 @18339 has 1 MA's), (75, 18396), (82, 18447), (107, 18564), (116, 18621),

Gene: Carthage\_22 Start: 17247, Stop: 17582, Start Num: 56

Candidate Starts for Carthage\_22:

(Start: 56 @17247 has 92 MA's), (Start: 59 @17253 has 357 MA's), (Start: 64 @17262 has 2 MA's),  
(Start: 65 @17265 has 1 MA's), (75, 17322), (82, 17373), (107, 17490), (116, 17547),

Gene: Casbah\_24 Start: 18860, Stop: 19231, Start Num: 59

Candidate Starts for Casbah\_24:

(34, 18785), (37, 18794), (Start: 59 @18860 has 357 MA's), (Start: 64 @18875 has 2 MA's), (75,  
18932), (76, 18938), (80, 18977), (83, 18986),

Gene: Caspiboi\_23 Start: 18048, Stop: 18377, Start Num: 59

Candidate Starts for Caspiboi\_23:

(Start: 56 @18042 has 92 MA's), (Start: 59 @18048 has 357 MA's), (Start: 64 @18057 has 2 MA's),  
(Start: 65 @18060 has 1 MA's), (75, 18117), (82, 18168), (107, 18285), (116, 18342),

Gene: Cepens\_18 Start: 17818, Stop: 18204, Start Num: 59

Candidate Starts for Cepens\_18:

(39, 17764), (Start: 59 @17818 has 357 MA's), (62, 17824), (Start: 64 @17830 has 2 MA's), (101,  
18106),

Gene: ChaChing\_25 Start: 19023, Stop: 19394, Start Num: 59

Candidate Starts for ChaChing\_25:

(34, 18948), (37, 18957), (Start: 59 @19023 has 357 MA's), (Start: 64 @19038 has 2 MA's), (75, 19095), (76, 19101), (80, 19140), (83, 19149),

Gene: ChadMasterC\_29 Start: 23497, Stop: 23904, Start Num: 53

Candidate Starts for ChadMasterC\_29:

(Start: 53 @23497 has 60 MA's), (Start: 64 @23518 has 2 MA's), (80, 23620), (99, 23695), (109, 23782), (119, 23833),

Gene: Chaelin\_23 Start: 18010, Stop: 18357, Start Num: 59

Candidate Starts for Chaelin\_23:

(Start: 56 @18004 has 92 MA's), (Start: 59 @18010 has 357 MA's), (Start: 64 @18019 has 2 MA's), (Start: 65 @18022 has 1 MA's), (75, 18079), (82, 18130), (116, 18322),

Gene: Chah\_25 Start: 18355, Stop: 18690, Start Num: 56

Candidate Starts for Chah\_25:

(Start: 56 @18355 has 92 MA's), (Start: 59 @18361 has 357 MA's), (Start: 64 @18370 has 2 MA's), (Start: 65 @18373 has 1 MA's), (75, 18430), (82, 18481), (107, 18598), (116, 18655),

Gene: Chalmers\_25 Start: 19814, Stop: 20185, Start Num: 59

Candidate Starts for Chalmers\_25:

(34, 19739), (37, 19748), (Start: 59 @19814 has 357 MA's), (Start: 64 @19829 has 2 MA's), (75, 19886), (76, 19892), (80, 19931), (83, 19940),

Gene: Chandler\_25 Start: 19782, Stop: 20153, Start Num: 59

Candidate Starts for Chandler\_25:

(34, 19707), (37, 19716), (Start: 59 @19782 has 357 MA's), (Start: 64 @19797 has 2 MA's), (75, 19854), (76, 19860), (80, 19899), (83, 19908),

Gene: Charles1\_24 Start: 18319, Stop: 18654, Start Num: 56

Candidate Starts for Charles1\_24:

(Start: 56 @18319 has 92 MA's), (Start: 59 @18325 has 357 MA's), (Start: 64 @18334 has 2 MA's), (Start: 65 @18337 has 1 MA's), (75, 18394), (82, 18445), (107, 18562), (116, 18619),

Gene: CharlieGBrown\_23 Start: 17913, Stop: 18242, Start Num: 59

Candidate Starts for CharlieGBrown\_23:

(Start: 59 @17913 has 357 MA's), (Start: 64 @17922 has 2 MA's), (Start: 65 @17925 has 1 MA's), (75, 17982), (82, 18033), (107, 18150), (116, 18207),

Gene: CharlottesWeb\_21 Start: 16794, Stop: 17123, Start Num: 59

Candidate Starts for CharlottesWeb\_21:

(Start: 59 @16794 has 357 MA's), (Start: 64 @16809 has 2 MA's), (77, 16887), (82, 16920), (111, 17091),

Gene: Charming\_29 Start: 22348, Stop: 22755, Start Num: 53

Candidate Starts for Charming\_29:

(Start: 53 @22348 has 60 MA's), (Start: 64 @22369 has 2 MA's), (80, 22471), (99, 22546), (109, 22633), (119, 22684),

Gene: CheetO\_24 Start: 18340, Stop: 18669, Start Num: 59

Candidate Starts for CheetO\_24:

(Start: 56 @18334 has 92 MA's), (Start: 59 @18340 has 357 MA's), (Start: 64 @18349 has 2 MA's), (Start: 65 @18352 has 1 MA's), (75, 18409), (82, 18460), (107, 18577), (116, 18634),

Gene: Chentzyk\_24 Start: 18878, Stop: 19249, Start Num: 59

Candidate Starts for Chentzyk\_24:

(34, 18803), (37, 18812), (Start: 59 @18878 has 357 MA's), (Start: 64 @18893 has 2 MA's), (75, 18950), (76, 18956), (80, 18995), (83, 19004),

Gene: Cher\_23 Start: 18060, Stop: 18395, Start Num: 56

Candidate Starts for Cher\_23:

(Start: 56 @18060 has 92 MA's), (Start: 59 @18066 has 357 MA's), (Start: 64 @18075 has 2 MA's), (Start: 65 @18078 has 1 MA's), (75, 18135), (82, 18186), (107, 18303), (116, 18360),

Gene: Chickadee\_26 Start: 19324, Stop: 19617, Start Num: 59

Candidate Starts for Chickadee\_26:

(46, 19300), (Start: 59 @19324 has 357 MA's), (73, 19384), (82, 19441),

Gene: Childish\_23 Start: 18054, Stop: 18383, Start Num: 59

Candidate Starts for Childish\_23:

(Start: 56 @18048 has 92 MA's), (Start: 59 @18054 has 357 MA's), (Start: 64 @18063 has 2 MA's), (Start: 65 @18066 has 1 MA's), (75, 18123), (82, 18174), (107, 18291), (116, 18348),

Gene: Chipette\_25 Start: 18557, Stop: 18892, Start Num: 56

Candidate Starts for Chipette\_25:

(Start: 56 @18557 has 92 MA's), (Start: 59 @18563 has 357 MA's), (Start: 64 @18572 has 2 MA's), (Start: 65 @18575 has 1 MA's), (75, 18632), (82, 18683), (107, 18800), (116, 18857),

Gene: Chorkpop\_24 Start: 18065, Stop: 18394, Start Num: 59

Candidate Starts for Chorkpop\_24:

(Start: 56 @18059 has 92 MA's), (Start: 59 @18065 has 357 MA's), (Start: 64 @18074 has 2 MA's), (Start: 65 @18077 has 1 MA's), (75, 18134), (82, 18185), (107, 18302), (116, 18359),

Gene: ChrisnMich\_21 Start: 17933, Stop: 18289, Start Num: 59

Candidate Starts for ChrisnMich\_21:

(37, 17867), (41, 17882), (Start: 59 @17933 has 357 MA's), (Start: 64 @17942 has 2 MA's), (75, 18005), (77, 18023), (80, 18050), (81, 18053), (83, 18059),

Gene: Chuni\_23 Start: 18359, Stop: 18688, Start Num: 59

Candidate Starts for Chuni\_23:

(Start: 56 @18353 has 92 MA's), (Start: 59 @18359 has 357 MA's), (Start: 64 @18368 has 2 MA's), (Start: 65 @18371 has 1 MA's), (75, 18428), (82, 18479), (107, 18596), (116, 18653),

Gene: Chunky\_24 Start: 18347, Stop: 18682, Start Num: 56

Candidate Starts for Chunky\_24:

(Start: 56 @18347 has 92 MA's), (Start: 59 @18353 has 357 MA's), (Start: 64 @18362 has 2 MA's), (Start: 65 @18365 has 1 MA's), (75, 18422), (82, 18473), (107, 18590), (116, 18647),

Gene: Chute\_23 Start: 18352, Stop: 18708, Start Num: 56

Candidate Starts for Chute\_23:

(Start: 56 @18352 has 92 MA's), (Start: 59 @18358 has 357 MA's), (Start: 64 @18367 has 2 MA's), (Start: 65 @18370 has 1 MA's), (75, 18427), (82, 18478), (107, 18613), (116, 18670),

Gene: Clawz\_52 Start: 29095, Stop: 29439, Start Num: 58

Candidate Starts for Clawz\_52:  
(Start: 58 @29095 has 5 MA's), (86, 29245),

Gene: CloverMinnie\_23 Start: 18206, Stop: 18547, Start Num: 59  
Candidate Starts for CloverMinnie\_23:  
(Start: 59 @18206 has 357 MA's), (Start: 64 @18221 has 2 MA's), (75, 18284), (77, 18302), (82, 18335), (105, 18470), (114, 18530),

Gene: Cobra\_24 Start: 18340, Stop: 18675, Start Num: 56  
Candidate Starts for Cobra\_24:  
(Start: 56 @18340 has 92 MA's), (Start: 59 @18346 has 357 MA's), (Start: 64 @18355 has 2 MA's), (Start: 65 @18358 has 1 MA's), (75, 18415), (82, 18466), (107, 18583), (116, 18640),

Gene: Coffee\_26 Start: 20594, Stop: 20947, Start Num: 59  
Candidate Starts for Coffee\_26:  
(15, 20321), (20, 20369), (28, 20465), (Start: 59 @20594 has 357 MA's), (83, 20714), (92, 20780), (96, 20801),

Gene: Colbert\_24 Start: 18337, Stop: 18672, Start Num: 56  
Candidate Starts for Colbert\_24:  
(Start: 56 @18337 has 92 MA's), (Start: 59 @18343 has 357 MA's), (Start: 64 @18352 has 2 MA's), (Start: 65 @18355 has 1 MA's), (75, 18412), (82, 18463), (107, 18580), (116, 18637),

Gene: ColdSoup\_53 Start: 29182, Stop: 29535, Start Num: 59  
Candidate Starts for ColdSoup\_53:  
(Start: 59 @29182 has 357 MA's), (73, 29242),

Gene: Coldpizza\_24 Start: 21131, Stop: 21454, Start Num: 61  
Candidate Starts for Coldpizza\_24:  
(6, 20741), (20, 20897), (28, 20990), (Start: 61 @21131 has 1 MA's), (69, 21170), (70, 21173), (75, 21200),

Gene: Coletti\_24 Start: 18358, Stop: 18708, Start Num: 59  
Candidate Starts for Coletti\_24:  
(Start: 56 @18352 has 92 MA's), (Start: 59 @18358 has 357 MA's), (Start: 64 @18367 has 2 MA's), (Start: 65 @18370 has 1 MA's), (75, 18427), (82, 18478), (107, 18613), (116, 18670),

Gene: Compostia\_26 Start: 19441, Stop: 19812, Start Num: 59  
Candidate Starts for Compostia\_26:  
(34, 19366), (37, 19375), (Start: 59 @19441 has 357 MA's), (Start: 64 @19456 has 2 MA's), (75, 19513), (76, 19519), (80, 19558), (83, 19567),

Gene: Cooper\_22 Start: 18047, Stop: 18406, Start Num: 59  
Candidate Starts for Cooper\_22:  
(37, 17981), (41, 17996), (46, 18011), (Start: 59 @18047 has 357 MA's), (Start: 64 @18056 has 2 MA's), (75, 18119), (80, 18164), (82, 18170), (83, 18173),

Gene: Cornbread\_23 Start: 18060, Stop: 18389, Start Num: 59  
Candidate Starts for Cornbread\_23:  
(Start: 59 @18060 has 357 MA's), (Start: 64 @18069 has 2 MA's), (Start: 65 @18072 has 1 MA's), (75, 18129), (82, 18180), (107, 18297), (116, 18354),

Gene: Cornobble\_23 Start: 17901, Stop: 18230, Start Num: 59

Candidate Starts for Cornobble\_23:

(Start: 56 @17895 has 92 MA's), (Start: 59 @17901 has 357 MA's), (Start: 64 @17910 has 2 MA's),  
(Start: 65 @17913 has 1 MA's), (75, 17970), (82, 18021), (107, 18138), (116, 18195),

Gene: Corofin\_25 Start: 19033, Stop: 19404, Start Num: 59

Candidate Starts for Corofin\_25:

(34, 18958), (37, 18967), (Start: 59 @19033 has 357 MA's), (Start: 64 @19048 has 2 MA's), (75,  
19105), (76, 19111), (80, 19150), (83, 19159),

Gene: Cosmolli16\_23 Start: 18060, Stop: 18389, Start Num: 59

Candidate Starts for Cosmolli16\_23:

(Start: 56 @18054 has 92 MA's), (Start: 59 @18060 has 357 MA's), (Start: 64 @18069 has 2 MA's),  
(Start: 65 @18072 has 1 MA's), (75, 18129), (82, 18180), (107, 18297), (116, 18354),

Gene: Craff\_24 Start: 18341, Stop: 18676, Start Num: 56

Candidate Starts for Craff\_24:

(Start: 56 @18341 has 92 MA's), (Start: 59 @18347 has 357 MA's), (Start: 64 @18356 has 2 MA's),  
(Start: 65 @18359 has 1 MA's), (75, 18416), (82, 18467), (107, 18584), (116, 18641),

Gene: Crownjwl\_24 Start: 18114, Stop: 18443, Start Num: 59

Candidate Starts for Crownjwl\_24:

(Start: 56 @18108 has 92 MA's), (Start: 59 @18114 has 357 MA's), (Start: 64 @18123 has 2 MA's),  
(Start: 65 @18126 has 1 MA's), (75, 18183), (82, 18234), (107, 18351), (116, 18408),

Gene: D12\_18 Start: 17811, Stop: 18197, Start Num: 59

Candidate Starts for D12\_18:

(39, 17757), (Start: 59 @17811 has 357 MA's), (62, 17817), (Start: 64 @17823 has 2 MA's), (101,  
18099),

Gene: DaddyDaniels\_24 Start: 18040, Stop: 18369, Start Num: 59

Candidate Starts for DaddyDaniels\_24:

(Start: 59 @18040 has 357 MA's), (Start: 64 @18049 has 2 MA's), (Start: 65 @18052 has 1 MA's), (75,  
18109), (82, 18160), (107, 18277), (116, 18334),

Gene: Daffy\_24 Start: 18066, Stop: 18395, Start Num: 59

Candidate Starts for Daffy\_24:

(Start: 56 @18060 has 92 MA's), (Start: 59 @18066 has 357 MA's), (Start: 64 @18075 has 2 MA's),  
(Start: 65 @18078 has 1 MA's), (75, 18135), (82, 18186), (107, 18303), (116, 18360),

Gene: Daisy\_25 Start: 19029, Stop: 19400, Start Num: 59

Candidate Starts for Daisy\_25:

(34, 18954), (37, 18963), (Start: 59 @19029 has 357 MA's), (Start: 64 @19044 has 2 MA's), (75,  
19101), (76, 19107), (80, 19146), (83, 19155),

Gene: Daka\_24 Start: 18337, Stop: 18672, Start Num: 56

Candidate Starts for Daka\_24:

(Start: 56 @18337 has 92 MA's), (Start: 59 @18343 has 357 MA's), (Start: 64 @18352 has 2 MA's),  
(Start: 65 @18355 has 1 MA's), (75, 18412), (82, 18463), (107, 18580), (116, 18637),

Gene: Dati\_24 Start: 18057, Stop: 18386, Start Num: 59

Candidate Starts for Dati\_24:

(Start: 59 @18057 has 357 MA's), (Start: 64 @18066 has 2 MA's), (Start: 65 @18069 has 1 MA's), (75,  
18126), (82, 18177), (107, 18294), (116, 18351),

Gene: Deenasa\_25 Start: 19771, Stop: 20142, Start Num: 59

Candidate Starts for Deenasa\_25:

(34, 19696), (37, 19705), (Start: 59 @19771 has 357 MA's), (Start: 64 @19786 has 2 MA's), (75, 19843), (76, 19849), (80, 19888), (83, 19897),

Gene: DelRivs\_23 Start: 18056, Stop: 18385, Start Num: 59

Candidate Starts for DelRivs\_23:

(Start: 59 @18056 has 357 MA's), (Start: 64 @18065 has 2 MA's), (Start: 65 @18068 has 1 MA's), (75, 18125), (82, 18176), (107, 18293), (116, 18350),

Gene: Delrey21\_28 Start: 22700, Stop: 23113, Start Num: 57

Candidate Starts for Delrey21\_28:

(Start: 57 @22700 has 9 MA's), (Start: 64 @22712 has 2 MA's), (72, 22760), (73, 22763), (81, 22817), (94, 22877), (102, 22937), (110, 22979), (118, 23021),

Gene: Derg\_24 Start: 21325, Stop: 21708, Start Num: 53

Candidate Starts for Derg\_24:

(Start: 53 @21325 has 60 MA's), (70, 21373), (73, 21391), (80, 21442), (109, 21604), (121, 21679),

Gene: Derpp\_23 Start: 17903, Stop: 18232, Start Num: 59

Candidate Starts for Derpp\_23:

(Start: 59 @17903 has 357 MA's), (Start: 64 @17912 has 2 MA's), (Start: 65 @17915 has 1 MA's), (75, 17972), (82, 18023), (107, 18140), (116, 18197),

Gene: Devonte\_25 Start: 19008, Stop: 19379, Start Num: 59

Candidate Starts for Devonte\_25:

(34, 18933), (37, 18942), (Start: 59 @19008 has 357 MA's), (Start: 64 @19023 has 2 MA's), (75, 19080), (76, 19086), (80, 19125), (83, 19134),

Gene: Dxdert\_27 Start: 19764, Stop: 20048, Start Num: 59

Candidate Starts for Dxdert\_27:

(32, 19656), (46, 19740), (Start: 59 @19764 has 357 MA's), (72, 19821), (82, 19881),

Gene: Dice\_23 Start: 18043, Stop: 18372, Start Num: 59

Candidate Starts for Dice\_23:

(Start: 56 @18037 has 92 MA's), (Start: 59 @18043 has 357 MA's), (Start: 64 @18052 has 2 MA's), (Start: 65 @18055 has 1 MA's), (75, 18112), (82, 18163), (107, 18280), (116, 18337),

Gene: DigitDog\_24 Start: 18646, Stop: 18981, Start Num: 59

Candidate Starts for DigitDog\_24:

(37, 18580), (Start: 55 @18640 has 2 MA's), (Start: 59 @18646 has 357 MA's), (75, 18715), (81, 18763), (83, 18769),

Gene: Dingo\_24 Start: 18321, Stop: 18656, Start Num: 56

Candidate Starts for Dingo\_24:

(Start: 56 @18321 has 92 MA's), (Start: 59 @18327 has 357 MA's), (Start: 64 @18336 has 2 MA's), (Start: 65 @18339 has 1 MA's), (75, 18396), (82, 18447), (107, 18564), (116, 18621),

Gene: Dione\_23 Start: 18038, Stop: 18373, Start Num: 56

Candidate Starts for Dione\_23:

(Start: 56 @18038 has 92 MA's), (Start: 59 @18044 has 357 MA's), (Start: 64 @18053 has 2 MA's), (Start: 65 @18056 has 1 MA's), (75, 18113), (82, 18164), (107, 18281), (116, 18338),

Gene: DirtJuice\_24 Start: 18329, Stop: 18658, Start Num: 59

Candidate Starts for DirtJuice\_24:

(Start: 56 @18323 has 92 MA's), (Start: 59 @18329 has 357 MA's), (Start: 64 @18338 has 2 MA's),  
(Start: 65 @18341 has 1 MA's), (75, 18398), (82, 18449), (107, 18566), (116, 18623),

Gene: DoctorFroggo\_28 Start: 22700, Stop: 23113, Start Num: 57

Candidate Starts for DoctorFroggo\_28:

(Start: 57 @22700 has 9 MA's), (Start: 64 @22712 has 2 MA's), (72, 22760), (73, 22763), (81, 22817),  
(94, 22877), (102, 22937), (110, 22979), (118, 23021),

Gene: Doddsville\_24 Start: 18057, Stop: 18386, Start Num: 59

Candidate Starts for Doddsville\_24:

(Start: 59 @18057 has 357 MA's), (Start: 64 @18066 has 2 MA's), (Start: 65 @18069 has 1 MA's), (75,  
18126), (82, 18177), (107, 18294), (116, 18351),

Gene: DoesntMatter\_24 Start: 18325, Stop: 18654, Start Num: 59

Candidate Starts for DoesntMatter\_24:

(Start: 56 @18319 has 92 MA's), (Start: 59 @18325 has 357 MA's), (Start: 64 @18334 has 2 MA's),  
(Start: 65 @18337 has 1 MA's), (75, 18394), (82, 18445), (107, 18562), (116, 18619),

Gene: DoIOn\_25 Start: 18570, Stop: 18905, Start Num: 56

Candidate Starts for DoIOn\_25:

(Start: 56 @18570 has 92 MA's), (Start: 59 @18576 has 357 MA's), (Start: 64 @18585 has 2 MA's),  
(Start: 65 @18588 has 1 MA's), (75, 18645), (82, 18696), (107, 18813), (116, 18870),

Gene: DonSanchon\_23 Start: 18036, Stop: 18371, Start Num: 56

Candidate Starts for DonSanchon\_23:

(Start: 56 @18036 has 92 MA's), (Start: 59 @18042 has 357 MA's), (Start: 64 @18051 has 2 MA's),  
(Start: 65 @18054 has 1 MA's), (75, 18111), (82, 18162), (107, 18279), (116, 18336),

Gene: DonTron\_52 Start: 29222, Stop: 29575, Start Num: 59

Candidate Starts for DonTron\_52:

(Start: 59 @29222 has 357 MA's), (73, 29282),

Gene: Donny\_24 Start: 19062, Stop: 19394, Start Num: 59

Candidate Starts for Donny\_24:

(8, 18684), (12, 18726), (17, 18792), (23, 18837), (30, 18930), (45, 19020), (Start: 52 @19047 has 1  
MA's), (Start: 59 @19062 has 357 MA's), (75, 19131), (81, 19179), (83, 19185),

Gene: DuchessDung\_22 Start: 17194, Stop: 17523, Start Num: 59

Candidate Starts for DuchessDung\_22:

(Start: 59 @17194 has 357 MA's), (Start: 64 @17203 has 2 MA's), (Start: 65 @17206 has 1 MA's), (75,  
17263), (82, 17314), (107, 17431), (116, 17488),

Gene: Duggie\_23 Start: 18059, Stop: 18388, Start Num: 59

Candidate Starts for Duggie\_23:

(Start: 59 @18059 has 357 MA's), (Start: 64 @18068 has 2 MA's), (Start: 65 @18071 has 1 MA's), (75,  
18128), (82, 18179), (107, 18296), (116, 18353),

Gene: Durga\_24 Start: 18356, Stop: 18685, Start Num: 59

Candidate Starts for Durga\_24:

(Start: 59 @18356 has 357 MA's), (Start: 64 @18365 has 2 MA's), (Start: 65 @18368 has 1 MA's), (75, 18425), (82, 18476), (107, 18593), (116, 18650),

Gene: EMoore\_25 Start: 21172, Stop: 21603, Start Num: 59

Candidate Starts for EMoore\_25:

(Start: 53 @21160 has 60 MA's), (Start: 59 @21172 has 357 MA's), (Start: 64 @21181 has 2 MA's), (68, 21205), (70, 21214), (73, 21232), (80, 21283), (93, 21355),

Gene: Eaglehorse\_26 Start: 20502, Stop: 20855, Start Num: 59

Candidate Starts for Eaglehorse\_26:

(15, 20229), (20, 20277), (28, 20373), (Start: 59 @20502 has 357 MA's), (83, 20622), (92, 20688), (96, 20709),

Gene: EastView9101\_23 Start: 18690, Stop: 19040, Start Num: 59

Candidate Starts for EastView9101\_23:

(Start: 56 @18684 has 92 MA's), (Start: 59 @18690 has 357 MA's), (75, 18759), (77, 18777), (79, 18789), (81, 18807), (83, 18813),

Gene: EdmundFerry\_25 Start: 19353, Stop: 19646, Start Num: 59

Candidate Starts for EdmundFerry\_25:

(46, 19329), (Start: 59 @19353 has 357 MA's), (73, 19413), (82, 19470),

Gene: ElvisPhasley\_24 Start: 18354, Stop: 18704, Start Num: 59

Candidate Starts for ElvisPhasley\_24:

(Start: 56 @18348 has 92 MA's), (Start: 59 @18354 has 357 MA's), (Start: 64 @18363 has 2 MA's), (Start: 65 @18366 has 1 MA's), (75, 18423), (82, 18474), (107, 18609), (116, 18666),

Gene: Emiris\_24 Start: 18336, Stop: 18665, Start Num: 59

Candidate Starts for Emiris\_24:

(Start: 56 @18330 has 92 MA's), (Start: 59 @18336 has 357 MA's), (Start: 64 @18345 has 2 MA's), (Start: 65 @18348 has 1 MA's), (75, 18405), (82, 18456), (107, 18573), (116, 18630),

Gene: EmpTee\_24 Start: 18342, Stop: 18671, Start Num: 59

Candidate Starts for EmpTee\_24:

(Start: 56 @18336 has 92 MA's), (Start: 59 @18342 has 357 MA's), (Start: 64 @18351 has 2 MA's), (Start: 65 @18354 has 1 MA's), (75, 18411), (82, 18462), (107, 18579), (116, 18636),

Gene: Epah\_21 Start: 17944, Stop: 18300, Start Num: 59

Candidate Starts for Epah\_21:

(37, 17878), (41, 17893), (Start: 59 @17944 has 357 MA's), (Start: 64 @17953 has 2 MA's), (75, 18016), (77, 18034), (80, 18061), (81, 18064), (83, 18070),

Gene: Eremos\_24 Start: 18342, Stop: 18671, Start Num: 59

Candidate Starts for Eremos\_24:

(Start: 56 @18336 has 92 MA's), (Start: 59 @18342 has 357 MA's), (Start: 64 @18351 has 2 MA's), (Start: 65 @18354 has 1 MA's), (75, 18411), (82, 18462), (107, 18579), (116, 18636),

Gene: Etaye\_24 Start: 18329, Stop: 18658, Start Num: 59

Candidate Starts for Etaye\_24:

(Start: 59 @18329 has 357 MA's), (Start: 64 @18338 has 2 MA's), (Start: 65 @18341 has 1 MA's), (75, 18398), (82, 18449), (107, 18566), (116, 18623),

Gene: Eugenia\_24 Start: 18355, Stop: 18684, Start Num: 59

Candidate Starts for Eugenia\_24:

(Start: 56 @18349 has 92 MA's), (Start: 59 @18355 has 357 MA's), (Start: 64 @18364 has 2 MA's),  
(Start: 65 @18367 has 1 MA's), (75, 18424), (82, 18475), (107, 18592), (116, 18649),

Gene: Evaa\_22 Start: 18139, Stop: 18468, Start Num: 60

Candidate Starts for Evaa\_22:

(Start: 60 @18139 has 1 MA's), (Start: 64 @18151 has 2 MA's), (80, 18256), (83, 18265),

Gene: Fanaw\_21 Start: 18638, Stop: 18994, Start Num: 59

Candidate Starts for Fanaw\_21:

(31, 18503), (37, 18572), (41, 18587), (46, 18602), (Start: 59 @18638 has 357 MA's), (Start: 64  
@18647 has 2 MA's), (75, 18710), (77, 18728), (80, 18755), (81, 18758), (83, 18764),

Gene: Fang\_24 Start: 18350, Stop: 18685, Start Num: 56

Candidate Starts for Fang\_24:

(Start: 56 @18350 has 92 MA's), (Start: 59 @18356 has 357 MA's), (Start: 64 @18365 has 2 MA's),  
(Start: 65 @18368 has 1 MA's), (75, 18425), (82, 18476), (107, 18593), (116, 18650),

Gene: Faze9\_26 Start: 20598, Stop: 20951, Start Num: 59

Candidate Starts for Faze9\_26:

(15, 20325), (20, 20373), (28, 20469), (Start: 59 @20598 has 357 MA's), (83, 20718), (92, 20784), (96,  
20805),

Gene: FelixTres\_23 Start: 18269, Stop: 18610, Start Num: 59

Candidate Starts for FelixTres\_23:

(Start: 59 @18269 has 357 MA's), (Start: 64 @18284 has 2 MA's), (75, 18347), (77, 18365), (82,  
18398), (114, 18593),

Gene: Fitzgerald\_27 Start: 22931, Stop: 23338, Start Num: 53

Candidate Starts for Fitzgerald\_27:

(Start: 53 @22931 has 60 MA's), (Start: 64 @22952 has 2 MA's), (80, 23054), (99, 23129), (109,  
23216), (119, 23267),

Gene: Flake\_25 Start: 18352, Stop: 18708, Start Num: 56

Candidate Starts for Flake\_25:

(Start: 56 @18352 has 92 MA's), (Start: 59 @18358 has 357 MA's), (Start: 64 @18367 has 2 MA's),  
(Start: 65 @18370 has 1 MA's), (75, 18427), (82, 18478), (107, 18613), (116, 18670),

Gene: Flatwoods\_29 Start: 21686, Stop: 22069, Start Num: 53

Candidate Starts for Flatwoods\_29:

(Start: 53 @21686 has 60 MA's), (70, 21734), (73, 21752), (80, 21803), (109, 21965), (121, 22040),

Gene: FleetyMac\_23 Start: 18342, Stop: 18671, Start Num: 59

Candidate Starts for FleetyMac\_23:

(Start: 59 @18342 has 357 MA's), (Start: 64 @18351 has 2 MA's), (Start: 65 @18354 has 1 MA's), (75,  
18411), (82, 18462), (107, 18579), (116, 18636),

Gene: FluffyNinja\_24 Start: 18348, Stop: 18677, Start Num: 59

Candidate Starts for FluffyNinja\_24:

(Start: 56 @18342 has 92 MA's), (Start: 59 @18348 has 357 MA's), (Start: 64 @18357 has 2 MA's),  
(Start: 65 @18360 has 1 MA's), (75, 18417), (82, 18468), (107, 18585), (116, 18642),

Gene: ForDig\_20 Start: 17526, Stop: 17846, Start Num: 59

Candidate Starts for ForDig\_20:

(Start: 59 @17526 has 357 MA's), (73, 17589), (77, 17616), (82, 17649),

Gene: Fosterous\_27 Start: 22764, Stop: 23171, Start Num: 53

Candidate Starts for Fosterous\_27:

(Start: 53 @22764 has 60 MA's), (Start: 64 @22785 has 2 MA's), (80, 22887), (99, 22962), (109, 23049), (119, 23100),

Gene: Fozzie\_23 Start: 18351, Stop: 18680, Start Num: 59

Candidate Starts for Fozzie\_23:

(Start: 56 @18345 has 92 MA's), (Start: 59 @18351 has 357 MA's), (Start: 64 @18360 has 2 MA's), (Start: 65 @18363 has 1 MA's), (75, 18420), (82, 18471), (107, 18588), (116, 18645),

Gene: Frankicide\_24 Start: 18342, Stop: 18671, Start Num: 59

Candidate Starts for Frankicide\_24:

(Start: 56 @18336 has 92 MA's), (Start: 59 @18342 has 357 MA's), (Start: 64 @18351 has 2 MA's), (Start: 65 @18354 has 1 MA's), (75, 18411), (82, 18462), (107, 18579), (116, 18636),

Gene: Frederick\_22 Start: 18979, Stop: 19335, Start Num: 59

Candidate Starts for Frederick\_22:

(31, 18844), (37, 18913), (41, 18928), (46, 18943), (Start: 59 @18979 has 357 MA's), (Start: 64 @18988 has 2 MA's), (75, 19051), (77, 19069), (80, 19096), (81, 19099), (83, 19105),

Gene: FremontTroll\_24 Start: 18039, Stop: 18368, Start Num: 59

Candidate Starts for FremontTroll\_24:

(Start: 56 @18033 has 92 MA's), (Start: 59 @18039 has 357 MA's), (Start: 64 @18048 has 2 MA's), (Start: 65 @18051 has 1 MA's), (75, 18108), (82, 18159), (107, 18276), (116, 18333),

Gene: FrenchFry\_26 Start: 20601, Stop: 20954, Start Num: 59

Candidate Starts for FrenchFry\_26:

(15, 20328), (20, 20376), (28, 20472), (Start: 59 @20601 has 357 MA's), (83, 20721), (92, 20787), (96, 20808),

Gene: Fresco\_21 Start: 16902, Stop: 17228, Start Num: 58

Candidate Starts for Fresco\_21:

(9, 16536), (11, 16554), (16, 16620), (20, 16665), (25, 16692), (28, 16758), (Start: 58 @16902 has 5 MA's), (77, 16995), (80, 17022), (111, 17196),

Gene: Freya\_23 Start: 18037, Stop: 18366, Start Num: 59

Candidate Starts for Freya\_23:

(Start: 56 @18031 has 92 MA's), (Start: 59 @18037 has 357 MA's), (Start: 64 @18046 has 2 MA's), (Start: 65 @18049 has 1 MA's), (75, 18106), (82, 18157), (107, 18274), (116, 18331),

Gene: FriarPreacher\_24 Start: 18362, Stop: 18691, Start Num: 59

Candidate Starts for FriarPreacher\_24:

(Start: 56 @18356 has 92 MA's), (Start: 59 @18362 has 357 MA's), (Start: 64 @18371 has 2 MA's), (Start: 65 @18374 has 1 MA's), (75, 18431), (82, 18482), (107, 18599), (116, 18656),

Gene: Fringe\_24 Start: 18326, Stop: 18655, Start Num: 59

Candidate Starts for Fringe\_24:

(Start: 56 @18320 has 92 MA's), (Start: 59 @18326 has 357 MA's), (Start: 64 @18335 has 2 MA's), (Start: 65 @18338 has 1 MA's), (75, 18395), (82, 18446), (107, 18563), (116, 18620),

Gene: FuegoCuervo\_31 Start: 21306, Stop: 21722, Start Num: 53

Candidate Starts for FuegoCuervo\_31:

(Start: 53 @21306 has 60 MA's), (Start: 64 @21327 has 2 MA's), (80, 21429), (99, 21504), (109, 21591), (119, 21642),

Gene: FugateOSU\_23 Start: 18048, Stop: 18377, Start Num: 59

Candidate Starts for FugateOSU\_23:

(Start: 56 @18042 has 92 MA's), (Start: 59 @18048 has 357 MA's), (Start: 64 @18057 has 2 MA's), (Start: 65 @18060 has 1 MA's), (75, 18117), (82, 18168), (107, 18285), (116, 18342),

Gene: Funsized\_27 Start: 21423, Stop: 21755, Start Num: 59

Candidate Starts for Funsized\_27:

(Start: 59 @21423 has 357 MA's), (75, 21492), (77, 21510), (81, 21540), (83, 21546), (107, 21669),

Gene: GTE6\_26 Start: 19842, Stop: 20135, Start Num: 59

Candidate Starts for GTE6\_26:

(46, 19818), (Start: 59 @19842 has 357 MA's), (72, 19899), (73, 19902), (82, 19959),

Gene: Gadjet\_26 Start: 19015, Stop: 19389, Start Num: 59

Candidate Starts for Gadjet\_26:

(34, 18940), (37, 18949), (Start: 59 @19015 has 357 MA's), (Start: 64 @19030 has 2 MA's), (75, 19087), (76, 19093), (80, 19132), (83, 19141),

Gene: Gaea\_28 Start: 21337, Stop: 21720, Start Num: 53

Candidate Starts for Gaea\_28:

(Start: 53 @21337 has 60 MA's), (70, 21385), (73, 21403), (80, 21454), (109, 21616),

Gene: Galadriel\_29 Start: 23253, Stop: 23660, Start Num: 53

Candidate Starts for Galadriel\_29:

(Start: 53 @23253 has 60 MA's), (Start: 64 @23274 has 2 MA's), (80, 23376), (99, 23451), (109, 23538), (119, 23589),

Gene: Gareth\_23 Start: 18039, Stop: 18374, Start Num: 56

Candidate Starts for Gareth\_23:

(Start: 56 @18039 has 92 MA's), (Start: 59 @18045 has 357 MA's), (Start: 64 @18054 has 2 MA's), (Start: 65 @18057 has 1 MA's), (75, 18114), (82, 18165), (107, 18282), (116, 18339),

Gene: GeneCoco\_24 Start: 18348, Stop: 18677, Start Num: 59

Candidate Starts for GeneCoco\_24:

(Start: 59 @18348 has 357 MA's), (Start: 64 @18357 has 2 MA's), (Start: 65 @18360 has 1 MA's), (75, 18417), (82, 18468), (107, 18585), (116, 18642),

Gene: Geodirt\_26 Start: 22236, Stop: 22643, Start Num: 53

Candidate Starts for Geodirt\_26:

(Start: 53 @22236 has 60 MA's), (Start: 64 @22257 has 2 MA's), (80, 22359), (99, 22434), (109, 22521), (119, 22572),

Gene: Gervas\_25 Start: 18989, Stop: 19363, Start Num: 59

Candidate Starts for Gervas\_25:

(34, 18914), (37, 18923), (Start: 59 @18989 has 357 MA's), (Start: 64 @19004 has 2 MA's), (75, 19061), (76, 19067), (80, 19106), (83, 19115),

Gene: GinPorsche\_21 Start: 17944, Stop: 18300, Start Num: 59

Candidate Starts for GinPorsche\_21:

(37, 17878), (41, 17893), (Start: 59 @17944 has 357 MA's), (Start: 64 @17953 has 2 MA's), (75, 18016), (77, 18034), (80, 18061), (81, 18064), (83, 18070),

Gene: Giraffe\_24 Start: 18044, Stop: 18379, Start Num: 56

Candidate Starts for Giraffe\_24:

(Start: 56 @18044 has 92 MA's), (Start: 59 @18050 has 357 MA's), (Start: 64 @18059 has 2 MA's), (Start: 65 @18062 has 1 MA's), (75, 18119), (82, 18170), (107, 18287), (116, 18344),

Gene: Glass\_26 Start: 20601, Stop: 20954, Start Num: 59

Candidate Starts for Glass\_26:

(15, 20328), (20, 20376), (28, 20472), (Start: 59 @20601 has 357 MA's), (83, 20721), (92, 20787), (96, 20808),

Gene: GlenHope\_26 Start: 18998, Stop: 19372, Start Num: 59

Candidate Starts for GlenHope\_26:

(34, 18923), (37, 18932), (Start: 59 @18998 has 357 MA's), (Start: 64 @19013 has 2 MA's), (75, 19070), (76, 19076), (80, 19115), (83, 19124),

Gene: Glubnar\_26 Start: 19013, Stop: 19384, Start Num: 59

Candidate Starts for Glubnar\_26:

(34, 18938), (37, 18947), (Start: 59 @19013 has 357 MA's), (Start: 64 @19028 has 2 MA's), (75, 19085), (76, 19091), (80, 19130), (83, 19139),

Gene: GodPhather\_19 Start: 18076, Stop: 18483, Start Num: 59

Candidate Starts for GodPhather\_19:

(2, 17641), (3, 17656), (4, 17674), (7, 17692), (13, 17758), (14, 17788), (24, 17866), (26, 17896), (39, 18022), (Start: 59 @18076 has 357 MA's), (62, 18082), (Start: 64 @18088 has 2 MA's), (101, 18385), (114, 18469),

Gene: Godines\_26 Start: 20494, Stop: 20847, Start Num: 59

Candidate Starts for Godines\_26:

(15, 20221), (20, 20269), (28, 20365), (Start: 59 @20494 has 357 MA's), (83, 20614), (92, 20680), (96, 20701), (110, 20809),

Gene: Gophee\_24 Start: 18328, Stop: 18657, Start Num: 59

Candidate Starts for Gophee\_24:

(Start: 56 @18322 has 92 MA's), (Start: 59 @18328 has 357 MA's), (Start: 64 @18337 has 2 MA's), (Start: 65 @18340 has 1 MA's), (75, 18397), (82, 18448), (107, 18565), (116, 18622),

Gene: Grand2040\_23 Start: 18059, Stop: 18394, Start Num: 56

Candidate Starts for Grand2040\_23:

(Start: 56 @18059 has 92 MA's), (Start: 59 @18065 has 357 MA's), (Start: 64 @18074 has 2 MA's), (Start: 65 @18077 has 1 MA's), (75, 18134), (82, 18185), (107, 18302), (116, 18359),

Gene: GreenChile\_24 Start: 18342, Stop: 18671, Start Num: 59

Candidate Starts for GreenChile\_24:

(Start: 56 @18336 has 92 MA's), (Start: 59 @18342 has 357 MA's), (Start: 64 @18351 has 2 MA's), (Start: 65 @18354 has 1 MA's), (75, 18411), (82, 18462), (107, 18579), (116, 18636),

Gene: Grumio\_52 Start: 28660, Stop: 29013, Start Num: 59

Candidate Starts for Grumio\_52:

(Start: 59 @28660 has 357 MA's), (73, 28720),

Gene: Gustavo\_28 Start: 21477, Stop: 21872, Start Num: 53

Candidate Starts for Gustavo\_28:

(Start: 53 @21477 has 60 MA's), (70, 21525), (73, 21543), (80, 21594), (100, 21687), (109, 21756), (121, 21831),

Gene: Gwennie1\_24 Start: 18367, Stop: 18717, Start Num: 59

Candidate Starts for Gwennie1\_24:

(Start: 56 @18361 has 92 MA's), (Start: 59 @18367 has 357 MA's), (Start: 64 @18376 has 2 MA's), (Start: 65 @18379 has 1 MA's), (75, 18436), (82, 18487), (107, 18622), (116, 18679),

Gene: Gwilliam\_24 Start: 18338, Stop: 18667, Start Num: 59

Candidate Starts for Gwilliam\_24:

(Start: 56 @18332 has 92 MA's), (Start: 59 @18338 has 357 MA's), (Start: 64 @18347 has 2 MA's), (Start: 65 @18350 has 1 MA's), (75, 18407), (82, 18458), (107, 18575), (116, 18632),

Gene: Gyarad\_0024 Start: 18340, Stop: 18669, Start Num: 59

Candidate Starts for Gyarad\_0024:

(Start: 56 @18334 has 92 MA's), (Start: 59 @18340 has 357 MA's), (Start: 64 @18349 has 2 MA's), (Start: 65 @18352 has 1 MA's), (75, 18409), (82, 18460), (107, 18577), (116, 18634),

Gene: HSavage\_24 Start: 18348, Stop: 18677, Start Num: 59

Candidate Starts for HSavage\_24:

(Start: 56 @18342 has 92 MA's), (Start: 59 @18348 has 357 MA's), (Start: 64 @18357 has 2 MA's), (Start: 65 @18360 has 1 MA's), (75, 18417), (82, 18468), (107, 18585), (116, 18642),

Gene: Haimas\_24 Start: 18343, Stop: 18672, Start Num: 59

Candidate Starts for Haimas\_24:

(Start: 56 @18337 has 92 MA's), (Start: 59 @18343 has 357 MA's), (Start: 64 @18352 has 2 MA's), (Start: 65 @18355 has 1 MA's), (75, 18412), (82, 18463), (107, 18580), (116, 18637),

Gene: Haleema\_23 Start: 18065, Stop: 18394, Start Num: 59

Candidate Starts for Haleema\_23:

(Start: 56 @18059 has 92 MA's), (Start: 59 @18065 has 357 MA's), (Start: 64 @18074 has 2 MA's), (Start: 65 @18077 has 1 MA's), (75, 18134), (82, 18185), (107, 18302), (116, 18359),

Gene: Halfpint\_24 Start: 18833, Stop: 19204, Start Num: 59

Candidate Starts for Halfpint\_24:

(34, 18758), (37, 18767), (Start: 59 @18833 has 357 MA's), (Start: 64 @18848 has 2 MA's), (75, 18905), (76, 18911), (80, 18950), (83, 18959),

Gene: Hally898\_21 Start: 17944, Stop: 18300, Start Num: 59

Candidate Starts for Hally898\_21:

(37, 17878), (41, 17893), (Start: 59 @17944 has 357 MA's), (Start: 64 @17953 has 2 MA's), (75, 18016), (77, 18034), (80, 18061), (81, 18064), (83, 18070),

Gene: Hamish\_24 Start: 18335, Stop: 18664, Start Num: 59

Candidate Starts for Hamish\_24:

(Start: 56 @18329 has 92 MA's), (Start: 59 @18335 has 357 MA's), (Start: 64 @18344 has 2 MA's), (Start: 65 @18347 has 1 MA's), (75, 18404), (82, 18455), (107, 18572), (116, 18629),

Gene: Hangman\_22 Start: 18977, Stop: 19327, Start Num: 59

Candidate Starts for Hangman\_22:

(37, 18911), (41, 18926), (46, 18941), (Start: 59 @18977 has 357 MA's), (Start: 64 @18986 has 2 MA's), (75, 19049), (77, 19067), (80, 19094), (81, 19097), (83, 19103),

Gene: Hans\_29 Start: 20978, Stop: 21424, Start Num: 53

Candidate Starts for Hans\_29:

(Start: 53 @20978 has 60 MA's), (Start: 59 @20990 has 357 MA's), (Start: 64 @20999 has 2 MA's), (70, 21032), (72, 21047), (73, 21050), (80, 21101),

Gene: Happabalu\_24 Start: 18037, Stop: 18387, Start Num: 59

Candidate Starts for Happabalu\_24:

(Start: 56 @18031 has 92 MA's), (Start: 59 @18037 has 357 MA's), (Start: 64 @18046 has 2 MA's), (Start: 65 @18049 has 1 MA's), (75, 18106), (82, 18157), (107, 18292), (116, 18349),

Gene: Hartsy\_24 Start: 18338, Stop: 18688, Start Num: 59

Candidate Starts for Hartsy\_24:

(Start: 56 @18332 has 92 MA's), (Start: 59 @18338 has 357 MA's), (Start: 64 @18347 has 2 MA's), (Start: 65 @18350 has 1 MA's), (75, 18407), (82, 18458), (107, 18593), (116, 18650),

Gene: Harvey\_24 Start: 18358, Stop: 18693, Start Num: 56

Candidate Starts for Harvey\_24:

(Start: 56 @18358 has 92 MA's), (Start: 59 @18364 has 357 MA's), (Start: 64 @18373 has 2 MA's), (Start: 65 @18376 has 1 MA's), (75, 18433), (82, 18484), (107, 18601), (116, 18658),

Gene: HarveySr\_25 Start: 18988, Stop: 19359, Start Num: 59

Candidate Starts for HarveySr\_25:

(34, 18913), (37, 18922), (Start: 59 @18988 has 357 MA's), (Start: 64 @19003 has 2 MA's), (75, 19060), (76, 19066), (80, 19105), (83, 19114),

Gene: Hashim76\_28 Start: 18827, Stop: 19150, Start Num: 59

Candidate Starts for Hashim76\_28:

(21, 18593), (22, 18596), (Start: 59 @18827 has 357 MA's), (78, 18923), (82, 18947), (107, 19064),

Gene: Heath\_21 Start: 18608, Stop: 18958, Start Num: 59

Candidate Starts for Heath\_21:

(19, 18365), (37, 18542), (41, 18557), (46, 18572), (Start: 59 @18608 has 357 MA's), (Start: 64 @18617 has 2 MA's), (75, 18680), (77, 18698), (80, 18725), (81, 18728), (83, 18734),

Gene: Heathcliff\_25 Start: 18970, Stop: 19341, Start Num: 59

Candidate Starts for Heathcliff\_25:

(34, 18895), (37, 18904), (Start: 59 @18970 has 357 MA's), (Start: 64 @18985 has 2 MA's), (75, 19042), (76, 19048), (80, 19087), (83, 19096),

Gene: Hedgerow\_26 Start: 20583, Stop: 20936, Start Num: 59

Candidate Starts for Hedgerow\_26:

(15, 20310), (20, 20358), (28, 20454), (Start: 59 @20583 has 357 MA's), (83, 20703), (92, 20769), (96, 20790),

Gene: Hekos\_21 Start: 16894, Stop: 17223, Start Num: 59

Candidate Starts for Hekos\_21:

(Start: 59 @16894 has 357 MA's), (Start: 64 @16903 has 2 MA's), (Start: 65 @16906 has 1 MA's), (75, 16963), (82, 17014), (107, 17131), (116, 17188),

Gene: Held\_24 Start: 18049, Stop: 18378, Start Num: 59

Candidate Starts for Held\_24:

(Start: 56 @18043 has 92 MA's), (Start: 59 @18049 has 357 MA's), (Start: 64 @18058 has 2 MA's),  
(Start: 65 @18061 has 1 MA's), (75, 18118), (82, 18169), (107, 18286), (116, 18343),

Gene: HenryJackson\_23 Start: 18065, Stop: 18394, Start Num: 59

Candidate Starts for HenryJackson\_23:

(Start: 56 @18059 has 92 MA's), (Start: 59 @18065 has 357 MA's), (Start: 64 @18074 has 2 MA's),  
(Start: 65 @18077 has 1 MA's), (75, 18134), (82, 18185), (107, 18302), (116, 18359),

Gene: Hertubise\_24 Start: 18357, Stop: 18686, Start Num: 59

Candidate Starts for Hertubise\_24:

(Start: 56 @18351 has 92 MA's), (Start: 59 @18357 has 357 MA's), (Start: 64 @18366 has 2 MA's),  
(Start: 65 @18369 has 1 MA's), (75, 18426), (82, 18477), (107, 18594), (116, 18651),

Gene: Hetaeria\_24 Start: 18352, Stop: 18687, Start Num: 56

Candidate Starts for Hetaeria\_24:

(Start: 56 @18352 has 92 MA's), (Start: 59 @18358 has 357 MA's), (Start: 64 @18367 has 2 MA's),  
(Start: 65 @18370 has 1 MA's), (75, 18427), (82, 18478), (107, 18595), (116, 18652),

Gene: HighStump\_23 Start: 18048, Stop: 18377, Start Num: 59

Candidate Starts for HighStump\_23:

(Start: 56 @18042 has 92 MA's), (Start: 59 @18048 has 357 MA's), (Start: 64 @18057 has 2 MA's),  
(Start: 65 @18060 has 1 MA's), (75, 18117), (82, 18168), (107, 18285), (116, 18342),

Gene: Hocus\_23 Start: 18052, Stop: 18381, Start Num: 59

Candidate Starts for Hocus\_23:

(Start: 59 @18052 has 357 MA's), (Start: 64 @18061 has 2 MA's), (Start: 65 @18064 has 1 MA's), (75,  
18121), (82, 18172), (107, 18289), (116, 18346),

Gene: HogWash\_23 Start: 18346, Stop: 18675, Start Num: 59

Candidate Starts for HogWash\_23:

(Start: 59 @18346 has 357 MA's), (Start: 64 @18355 has 2 MA's), (Start: 65 @18358 has 1 MA's), (75,  
18415), (82, 18466), (107, 18583), (116, 18640),

Gene: Holeinone\_26 Start: 20479, Stop: 20832, Start Num: 59

Candidate Starts for Holeinone\_26:

(15, 20206), (20, 20254), (28, 20350), (Start: 59 @20479 has 357 MA's), (76, 20551), (83, 20599), (92,  
20665), (96, 20686),

Gene: Horchata\_24 Start: 18327, Stop: 18656, Start Num: 59

Candidate Starts for Horchata\_24:

(Start: 56 @18321 has 92 MA's), (Start: 59 @18327 has 357 MA's), (Start: 64 @18336 has 2 MA's),  
(Start: 65 @18339 has 1 MA's), (75, 18396), (82, 18447), (107, 18564), (116, 18621),

Gene: Hosp\_018 Start: 15739, Stop: 16062, Start Num: 59

Candidate Starts for Hosp\_018:

(Start: 59 @15739 has 357 MA's), (73, 15802), (77, 15829), (82, 15862),

Gene: Hydro\_22 Start: 18976, Stop: 19332, Start Num: 59

Candidate Starts for Hydro\_22:

(37, 18910), (41, 18925), (46, 18940), (Start: 59 @18976 has 357 MA's), (Start: 64 @18985 has 2  
MA's), (75, 19048), (77, 19066), (80, 19093), (81, 19096), (83, 19102),

Gene: ImtiyazSitla\_23 Start: 17893, Stop: 18222, Start Num: 59

Candidate Starts for ImtiyazSitla\_23:

(Start: 59 @17893 has 357 MA's), (Start: 64 @17902 has 2 MA's), (Start: 65 @17905 has 1 MA's), (75, 17962), (82, 18013), (107, 18130), (116, 18187),

Gene: Imvubu\_18 Start: 16096, Stop: 16425, Start Num: 59

Candidate Starts for Imvubu\_18:

(35, 16027), (38, 16036), (Start: 59 @16096 has 357 MA's), (77, 16183), (82, 16216), (83, 16219), (106, 16330), (107, 16333), (113, 16378),

Gene: Inchworm\_24 Start: 18334, Stop: 18663, Start Num: 59

Candidate Starts for Inchworm\_24:

(Start: 56 @18328 has 92 MA's), (Start: 59 @18334 has 357 MA's), (Start: 64 @18343 has 2 MA's), (Start: 65 @18346 has 1 MA's), (75, 18403), (82, 18454), (107, 18571), (116, 18628),

Gene: Indlovu\_22 Start: 18708, Stop: 19040, Start Num: 59

Candidate Starts for Indlovu\_22:

(Start: 59 @18708 has 357 MA's), (75, 18777), (77, 18795), (82, 18828), (83, 18831),

Gene: Inspectinfecti\_28 Start: 21402, Stop: 21848, Start Num: 53

Candidate Starts for Inspectinfecti\_28:

(Start: 53 @21402 has 60 MA's), (Start: 59 @21414 has 357 MA's), (Start: 64 @21423 has 2 MA's), (70, 21456), (72, 21471), (73, 21474), (80, 21525), (93, 21594), (103, 21672),

Gene: Inverness\_24 Start: 18348, Stop: 18677, Start Num: 59

Candidate Starts for Inverness\_24:

(Start: 56 @18342 has 92 MA's), (Start: 59 @18348 has 357 MA's), (Start: 64 @18357 has 2 MA's), (Start: 65 @18360 has 1 MA's), (75, 18417), (82, 18468), (107, 18585), (116, 18642),

Gene: Iridessa\_24 Start: 18017, Stop: 18364, Start Num: 59

Candidate Starts for Iridessa\_24:

(Start: 56 @18011 has 92 MA's), (Start: 59 @18017 has 357 MA's), (Start: 64 @18026 has 2 MA's), (Start: 65 @18029 has 1 MA's), (75, 18086), (82, 18137), (116, 18329),

Gene: Iridoclysis\_24 Start: 18322, Stop: 18651, Start Num: 59

Candidate Starts for Iridoclysis\_24:

(Start: 56 @18316 has 92 MA's), (Start: 59 @18322 has 357 MA's), (Start: 64 @18331 has 2 MA's), (Start: 65 @18334 has 1 MA's), (75, 18391), (82, 18442), (107, 18559), (116, 18616),

Gene: IsaacEli\_24 Start: 18346, Stop: 18681, Start Num: 56

Candidate Starts for IsaacEli\_24:

(Start: 56 @18346 has 92 MA's), (Start: 59 @18352 has 357 MA's), (Start: 64 @18361 has 2 MA's), (Start: 65 @18364 has 1 MA's), (75, 18421), (82, 18472), (107, 18589), (116, 18646),

Gene: ItsyBitsy1\_26 Start: 20472, Stop: 20825, Start Num: 59

Candidate Starts for ItsyBitsy1\_26:

(15, 20199), (20, 20247), (28, 20343), (Start: 59 @20472 has 357 MA's), (83, 20592), (92, 20658), (96, 20679),

Gene: JAMaL\_22 Start: 19158, Stop: 19496, Start Num: 59

Candidate Starts for JAMaL\_22:

(45, 19116), (Start: 59 @19158 has 357 MA's), (75, 19230), (77, 19248), (80, 19275), (81, 19278), (83, 19284), (88, 19311), (120, 19488),

Gene: JDog\_23 Start: 18059, Stop: 18388, Start Num: 59

Candidate Starts for JDog\_23:

(Start: 59 @18059 has 357 MA's), (Start: 64 @18068 has 2 MA's), (Start: 65 @18071 has 1 MA's), (75, 18128), (82, 18179), (107, 18296), (116, 18353),

Gene: JKSyngboy\_26 Start: 22046, Stop: 22429, Start Num: 53

Candidate Starts for JKSyngboy\_26:

(Start: 53 @22046 has 60 MA's), (70, 22094), (73, 22112), (80, 22163), (109, 22325),

Gene: Jabberwocky\_27 Start: 23395, Stop: 23799, Start Num: 53

Candidate Starts for Jabberwocky\_27:

(Start: 53 @23395 has 60 MA's), (Start: 64 @23416 has 2 MA's), (80, 23518), (99, 23593), (109, 23677), (119, 23728),

Gene: JacAttac\_24 Start: 18328, Stop: 18663, Start Num: 56

Candidate Starts for JacAttac\_24:

(Start: 56 @18328 has 92 MA's), (Start: 59 @18334 has 357 MA's), (Start: 64 @18343 has 2 MA's), (Start: 65 @18346 has 1 MA's), (75, 18403), (82, 18454), (107, 18571), (116, 18628),

Gene: Jackstina\_23 Start: 18934, Stop: 19305, Start Num: 59

Candidate Starts for Jackstina\_23:

(34, 18859), (37, 18868), (Start: 59 @18934 has 357 MA's), (Start: 64 @18949 has 2 MA's), (75, 19006), (76, 19012), (80, 19051), (83, 19060),

Gene: JaguarMi\_22 Start: 18438, Stop: 18794, Start Num: 59

Candidate Starts for JaguarMi\_22:

(37, 18372), (41, 18387), (46, 18402), (Start: 59 @18438 has 357 MA's), (Start: 64 @18447 has 2 MA's), (75, 18510), (77, 18528), (80, 18555), (81, 18558), (83, 18564),

Gene: JakeO\_23 Start: 18059, Stop: 18388, Start Num: 59

Candidate Starts for JakeO\_23:

(Start: 59 @18059 has 357 MA's), (Start: 64 @18068 has 2 MA's), (Start: 65 @18071 has 1 MA's), (75, 18128), (82, 18179), (107, 18296), (116, 18353),

Gene: JangoPhett\_24 Start: 18332, Stop: 18661, Start Num: 59

Candidate Starts for JangoPhett\_24:

(Start: 56 @18326 has 92 MA's), (Start: 59 @18332 has 357 MA's), (Start: 64 @18341 has 2 MA's), (Start: 65 @18344 has 1 MA's), (75, 18401), (82, 18452), (107, 18569), (116, 18626),

Gene: Jeon\_18 Start: 17818, Stop: 18225, Start Num: 59

Candidate Starts for Jeon\_18:

(2, 17383), (3, 17398), (4, 17416), (7, 17434), (13, 17500), (14, 17530), (24, 17608), (26, 17638), (39, 17764), (Start: 59 @17818 has 357 MA's), (62, 17824), (Start: 64 @17830 has 2 MA's), (101, 18127), (114, 18211),

Gene: Jesabah\_24 Start: 18054, Stop: 18389, Start Num: 56

Candidate Starts for Jesabah\_24:

(Start: 56 @18054 has 92 MA's), (Start: 59 @18060 has 357 MA's), (Start: 64 @18069 has 2 MA's), (Start: 65 @18072 has 1 MA's), (75, 18129), (82, 18180), (107, 18297), (116, 18354),

Gene: Jillium\_23 Start: 18052, Stop: 18387, Start Num: 56

Candidate Starts for Jillium\_23:

(Start: 56 @18052 has 92 MA's), (Start: 59 @18058 has 357 MA's), (Start: 64 @18067 has 2 MA's),  
(Start: 65 @18070 has 1 MA's), (75, 18127), (82, 18178), (107, 18295), (116, 18352),

Gene: Jiminy\_23 Start: 17897, Stop: 18226, Start Num: 59

Candidate Starts for Jiminy\_23:

(Start: 59 @17897 has 357 MA's), (Start: 64 @17906 has 2 MA's), (Start: 65 @17909 has 1 MA's), (75, 17966), (82, 18017), (107, 18134), (116, 18191),

Gene: Jiraiya\_23 Start: 18056, Stop: 18385, Start Num: 59

Candidate Starts for Jiraiya\_23:

(Start: 56 @18050 has 92 MA's), (Start: 59 @18056 has 357 MA's), (Start: 64 @18065 has 2 MA's),  
(Start: 65 @18068 has 1 MA's), (75, 18125), (82, 18176), (107, 18293), (116, 18350),

Gene: Jolie1\_020 Start: 17512, Stop: 17832, Start Num: 59

Candidate Starts for Jolie1\_020:

(Start: 59 @17512 has 357 MA's), (73, 17575), (77, 17602), (82, 17635),

Gene: Jollymon\_52 Start: 29182, Stop: 29535, Start Num: 59

Candidate Starts for Jollymon\_52:

(Start: 59 @29182 has 357 MA's), (73, 29242),

Gene: JoyceMaria\_22 Start: 18977, Stop: 19333, Start Num: 59

Candidate Starts for JoyceMaria\_22:

(37, 18911), (41, 18926), (46, 18941), (Start: 59 @18977 has 357 MA's), (Start: 64 @18986 has 2 MA's),  
(75, 19049), (77, 19067), (80, 19094), (81, 19097), (83, 19103),

Gene: KLucky39\_24 Start: 18334, Stop: 18669, Start Num: 56

Candidate Starts for KLucky39\_24:

(Start: 56 @18334 has 92 MA's), (Start: 59 @18340 has 357 MA's), (Start: 64 @18349 has 2 MA's),  
(Start: 65 @18352 has 1 MA's), (75, 18409), (82, 18460), (107, 18577), (116, 18634),

Gene: Kahve\_23 Start: 18062, Stop: 18391, Start Num: 59

Candidate Starts for Kahve\_23:

(Start: 56 @18056 has 92 MA's), (Start: 59 @18062 has 357 MA's), (Start: 64 @18071 has 2 MA's),  
(Start: 65 @18074 has 1 MA's), (75, 18131), (82, 18182), (107, 18299), (116, 18356),

Gene: Kailash\_24 Start: 18350, Stop: 18700, Start Num: 59

Candidate Starts for Kailash\_24:

(Start: 56 @18344 has 92 MA's), (Start: 59 @18350 has 357 MA's), (Start: 64 @18359 has 2 MA's),  
(Start: 65 @18362 has 1 MA's), (75, 18419), (82, 18470), (107, 18605), (116, 18662),

Gene: Kaleb\_26 Start: 20598, Stop: 20951, Start Num: 59

Candidate Starts for Kaleb\_26:

(15, 20325), (20, 20373), (28, 20469), (Start: 59 @20598 has 357 MA's), (83, 20718), (92, 20784), (96, 20805),

Gene: Kamashten\_28 Start: 22841, Stop: 23248, Start Num: 53

Candidate Starts for Kamashten\_28:

(Start: 53 @22841 has 60 MA's), (Start: 64 @22862 has 2 MA's), (80, 22964), (99, 23039), (109, 23126), (119, 23177),

Gene: Kamiyu\_25 Start: 18977, Stop: 19348, Start Num: 59

Candidate Starts for Kamiyu\_25:

(34, 18902), (37, 18911), (Start: 59 @18977 has 357 MA's), (Start: 64 @18992 has 2 MA's), (75, 19049), (76, 19055), (80, 19094), (83, 19103),

Gene: KarasumaRum\_26 Start: 19179, Stop: 19514, Start Num: 59

Candidate Starts for KarasumaRum\_26:

(37, 19113), (Start: 55 @19173 has 2 MA's), (Start: 59 @19179 has 357 MA's), (75, 19248), (81, 19296), (83, 19302),

Gene: Karn\_23 Start: 18057, Stop: 18386, Start Num: 59

Candidate Starts for Karn\_23:

(Start: 59 @18057 has 357 MA's), (Start: 64 @18066 has 2 MA's), (Start: 65 @18069 has 1 MA's), (75, 18126), (82, 18177), (107, 18294), (116, 18351),

Gene: Katniss\_24 Start: 18360, Stop: 18689, Start Num: 59

Candidate Starts for Katniss\_24:

(Start: 56 @18354 has 92 MA's), (Start: 59 @18360 has 357 MA's), (Start: 64 @18369 has 2 MA's), (Start: 65 @18372 has 1 MA's), (75, 18429), (82, 18480), (107, 18597), (116, 18654),

Gene: KayaCho\_20 Start: 17522, Stop: 17839, Start Num: 59

Candidate Starts for KayaCho\_20:

(Start: 59 @17522 has 357 MA's), (77, 17612), (80, 17639), (82, 17645),

Gene: Keitabear\_29 Start: 24197, Stop: 24604, Start Num: 53

Candidate Starts for Keitabear\_29:

(Start: 53 @24197 has 60 MA's), (Start: 64 @24218 has 2 MA's), (80, 24320), (99, 24395), (109, 24482), (119, 24533),

Gene: Keitherie\_24 Start: 18363, Stop: 18710, Start Num: 59

Candidate Starts for Keitherie\_24:

(Start: 56 @18357 has 92 MA's), (Start: 59 @18363 has 357 MA's), (Start: 64 @18372 has 2 MA's), (Start: 65 @18375 has 1 MA's), (75, 18432), (82, 18483), (116, 18675),

Gene: Kewpiedoll\_28 Start: 22038, Stop: 22445, Start Num: 53

Candidate Starts for Kewpiedoll\_28:

(Start: 53 @22038 has 60 MA's), (Start: 64 @22059 has 2 MA's), (80, 22161), (99, 22236), (109, 22323), (119, 22374),

Gene: Khan1\_24 Start: 18056, Stop: 18406, Start Num: 59

Candidate Starts for Khan1\_24:

(Start: 56 @18050 has 92 MA's), (Start: 59 @18056 has 357 MA's), (Start: 64 @18065 has 2 MA's), (Start: 65 @18068 has 1 MA's), (75, 18125), (82, 18176), (107, 18311), (116, 18368),

Gene: Kheth\_26 Start: 20484, Stop: 20837, Start Num: 59

Candidate Starts for Kheth\_26:

(15, 20211), (20, 20259), (28, 20355), (Start: 59 @20484 has 357 MA's), (83, 20604), (92, 20670), (96, 20691),

Gene: Kikipoo\_24 Start: 18346, Stop: 18681, Start Num: 56

Candidate Starts for Kikipoo\_24:

(Start: 56 @18346 has 92 MA's), (Start: 59 @18352 has 357 MA's), (Start: 64 @18361 has 2 MA's), (Start: 65 @18364 has 1 MA's), (75, 18421), (82, 18472), (107, 18589), (116, 18646),

Gene: Kimbrough\_24 Start: 18054, Stop: 18383, Start Num: 59

Candidate Starts for Kimbrough\_24:

(Start: 56 @18048 has 92 MA's), (Start: 59 @18054 has 357 MA's), (Start: 64 @18063 has 2 MA's),  
(Start: 65 @18066 has 1 MA's), (75, 18123), (82, 18174), (107, 18291), (116, 18348),

Gene: KingVeVeVe\_24 Start: 18331, Stop: 18660, Start Num: 59

Candidate Starts for KingVeVeVe\_24:

(Start: 56 @18325 has 92 MA's), (Start: 59 @18331 has 357 MA's), (Start: 64 @18340 has 2 MA's),  
(Start: 65 @18343 has 1 MA's), (75, 18400), (82, 18451), (107, 18568), (116, 18625),

Gene: KingstonB\_53 Start: 28660, Stop: 29013, Start Num: 59

Candidate Starts for KingstonB\_53:

(Start: 59 @28660 has 357 MA's), (73, 28720),

Gene: KlimbOn\_24 Start: 18340, Stop: 18669, Start Num: 59

Candidate Starts for KlimbOn\_24:

(Start: 56 @18334 has 92 MA's), (Start: 59 @18340 has 357 MA's), (Start: 64 @18349 has 2 MA's),  
(Start: 65 @18352 has 1 MA's), (75, 18409), (82, 18460), (107, 18577), (116, 18634),

Gene: Kloppinator\_24 Start: 18360, Stop: 18689, Start Num: 59

Candidate Starts for Kloppinator\_24:

(Start: 56 @18354 has 92 MA's), (Start: 59 @18360 has 357 MA's), (Start: 64 @18369 has 2 MA's),  
(Start: 65 @18372 has 1 MA's), (75, 18429), (82, 18480), (107, 18597), (116, 18654),

Gene: Knocker\_26 Start: 21465, Stop: 21791, Start Num: 59

Candidate Starts for Knocker\_26:

(44, 21420), (51, 21447), (Start: 59 @21465 has 357 MA's), (75, 21534), (77, 21552), (79, 21564), (83,  
21588), (91, 21621), (95, 21633), (107, 21702),

Gene: Kolhan\_26 Start: 20481, Stop: 20834, Start Num: 59

Candidate Starts for Kolhan\_26:

(15, 20208), (20, 20256), (28, 20352), (Start: 59 @20481 has 357 MA's), (83, 20601), (92, 20667), (96,  
20688),

Gene: Kronus\_24 Start: 19591, Stop: 19962, Start Num: 59

Candidate Starts for Kronus\_24:

(34, 19516), (37, 19525), (Start: 59 @19591 has 357 MA's), (Start: 64 @19606 has 2 MA's), (75,  
19663), (76, 19669), (80, 19708), (83, 19717),

Gene: Kroos\_29 Start: 22230, Stop: 22625, Start Num: 53

Candidate Starts for Kroos\_29:

(Start: 53 @22230 has 60 MA's), (70, 22278), (73, 22296), (80, 22347), (109, 22509), (121, 22584),

Gene: Kwadwo\_23 Start: 18044, Stop: 18373, Start Num: 59

Candidate Starts for Kwadwo\_23:

(Start: 56 @18038 has 92 MA's), (Start: 59 @18044 has 357 MA's), (Start: 64 @18053 has 2 MA's),  
(Start: 65 @18056 has 1 MA's), (75, 18113), (82, 18164), (107, 18281), (116, 18338),

Gene: Kwekel\_26 Start: 19283, Stop: 19567, Start Num: 59

Candidate Starts for Kwekel\_26:

(32, 19175), (46, 19259), (Start: 59 @19283 has 357 MA's), (72, 19340), (82, 19400),

Gene: Kwksand96\_23 Start: 17907, Stop: 18236, Start Num: 59

Candidate Starts for Kwksand96\_23:

(Start: 59 @17907 has 357 MA's), (Start: 64 @17916 has 2 MA's), (Start: 65 @17919 has 1 MA's), (75, 17976), (82, 18027), (107, 18144), (116, 18201),

Gene: Kwobi\_30 Start: 22216, Stop: 22611, Start Num: 53

Candidate Starts for Kwobi\_30:

(Start: 53 @22216 has 60 MA's), (70, 22264), (73, 22282), (80, 22333), (100, 22426), (109, 22495), (121, 22570),

Gene: Labeouficaum\_23 Start: 17903, Stop: 18232, Start Num: 59

Candidate Starts for Labeouficaum\_23:

(Start: 59 @17903 has 357 MA's), (Start: 64 @17912 has 2 MA's), (Start: 65 @17915 has 1 MA's), (75, 17972), (82, 18023), (107, 18140), (116, 18197),

Gene: Lambano\_21 Start: 17944, Stop: 18300, Start Num: 59

Candidate Starts for Lambano\_21:

(37, 17878), (41, 17893), (Start: 59 @17944 has 357 MA's), (Start: 64 @17953 has 2 MA's), (75, 18016), (77, 18034), (80, 18061), (81, 18064), (83, 18070),

Gene: Lars\_26 Start: 20601, Stop: 20954, Start Num: 59

Candidate Starts for Lars\_26:

(15, 20328), (20, 20376), (28, 20472), (Start: 59 @20601 has 357 MA's), (83, 20721), (92, 20787), (96, 20808),

Gene: Larson\_25 Start: 18358, Stop: 18708, Start Num: 59

Candidate Starts for Larson\_25:

(Start: 56 @18352 has 92 MA's), (Start: 59 @18358 has 357 MA's), (Start: 64 @18367 has 2 MA's), (Start: 65 @18370 has 1 MA's), (75, 18427), (82, 18478), (107, 18613), (116, 18670),

Gene: LasagnaCat\_24 Start: 18346, Stop: 18675, Start Num: 59

Candidate Starts for LasagnaCat\_24:

(Start: 56 @18340 has 92 MA's), (Start: 59 @18346 has 357 MA's), (Start: 64 @18355 has 2 MA's), (Start: 65 @18358 has 1 MA's), (75, 18415), (82, 18466), (107, 18583), (116, 18640),

Gene: Lasso\_24 Start: 18313, Stop: 18648, Start Num: 56

Candidate Starts for Lasso\_24:

(Start: 56 @18313 has 92 MA's), (Start: 59 @18319 has 357 MA's), (Start: 64 @18328 has 2 MA's), (Start: 65 @18331 has 1 MA's), (75, 18388), (82, 18439), (107, 18556), (116, 18613),

Gene: Laurie\_26 Start: 20476, Stop: 20832, Start Num: 59

Candidate Starts for Laurie\_26:

(Start: 59 @20476 has 357 MA's), (83, 20596), (92, 20665), (96, 20686),

Gene: LeeLot\_24 Start: 18338, Stop: 18673, Start Num: 56

Candidate Starts for LeeLot\_24:

(Start: 56 @18338 has 92 MA's), (Start: 59 @18344 has 357 MA's), (Start: 64 @18353 has 2 MA's), (Start: 65 @18356 has 1 MA's), (75, 18413), (82, 18464), (107, 18581), (116, 18638),

Gene: Lego3393\_24 Start: 18350, Stop: 18685, Start Num: 56

Candidate Starts for Lego3393\_24:

(Start: 56 @18350 has 92 MA's), (Start: 59 @18356 has 357 MA's), (Start: 64 @18365 has 2 MA's), (Start: 65 @18368 has 1 MA's), (75, 18425), (82, 18476), (107, 18593), (116, 18650),

Gene: Legolas\_23 Start: 18060, Stop: 18389, Start Num: 59

Candidate Starts for Legolas\_23:

(Start: 56 @18054 has 92 MA's), (Start: 59 @18060 has 357 MA's), (Start: 64 @18069 has 2 MA's),  
(Start: 65 @18072 has 1 MA's), (75, 18129), (82, 18180), (107, 18297), (116, 18354),

Gene: Lehmann\_24 Start: 17880, Stop: 18215, Start Num: 56

Candidate Starts for Lehmann\_24:

(Start: 56 @17880 has 92 MA's), (Start: 59 @17886 has 357 MA's), (Start: 64 @17895 has 2 MA's),  
(Start: 65 @17898 has 1 MA's), (75, 17955), (82, 18006), (107, 18123), (116, 18180),

Gene: LeiMonet\_24 Start: 18051, Stop: 18380, Start Num: 59

Candidate Starts for LeiMonet\_24:

(Start: 56 @18045 has 92 MA's), (Start: 59 @18051 has 357 MA's), (Start: 64 @18060 has 2 MA's),  
(Start: 65 @18063 has 1 MA's), (75, 18120), (82, 18171), (107, 18288), (116, 18345),

Gene: LemonSlice\_24 Start: 18051, Stop: 18380, Start Num: 59

Candidate Starts for LemonSlice\_24:

(Start: 56 @18045 has 92 MA's), (Start: 59 @18051 has 357 MA's), (Start: 64 @18060 has 2 MA's),  
(Start: 65 @18063 has 1 MA's), (75, 18120), (82, 18171), (107, 18288), (116, 18345),

Gene: Lennon\_29 Start: 23999, Stop: 24406, Start Num: 53

Candidate Starts for Lennon\_29:

(Start: 53 @23999 has 60 MA's), (Start: 64 @24020 has 2 MA's), (80, 24122), (99, 24197), (109,  
24284), (119, 24335),

Gene: Leonard\_27 Start: 20976, Stop: 21422, Start Num: 53

Candidate Starts for Leonard\_27:

(Start: 53 @20976 has 60 MA's), (Start: 59 @20988 has 357 MA's), (Start: 64 @20997 has 2 MA's),  
(70, 21030), (73, 21048), (80, 21099), (93, 21168), (103, 21246),

Gene: Lephleur\_26 Start: 20481, Stop: 20837, Start Num: 59

Candidate Starts for Lephleur\_26:

(15, 20208), (20, 20256), (28, 20352), (Start: 59 @20481 has 357 MA's), (83, 20601), (92, 20670), (96,  
20691),

Gene: LestyG\_25 Start: 19012, Stop: 19383, Start Num: 59

Candidate Starts for LestyG\_25:

(34, 18937), (37, 18946), (Start: 59 @19012 has 357 MA's), (Start: 64 @19027 has 2 MA's), (75,  
19084), (76, 19090), (80, 19129), (83, 19138),

Gene: Ligma\_21 Start: 16902, Stop: 17228, Start Num: 58

Candidate Starts for Ligma\_21:

(9, 16536), (11, 16554), (16, 16620), (20, 16665), (25, 16692), (28, 16758), (Start: 58 @16902 has 5  
MA's), (77, 16995), (80, 17022), (111, 17196),

Gene: LilHam\_26 Start: 20810, Stop: 21205, Start Num: 53

Candidate Starts for LilHam\_26:

(Start: 53 @20810 has 60 MA's), (70, 20858), (73, 20876), (80, 20927), (100, 21020), (109, 21089),  
(121, 21164),

Gene: LilMcDreamy\_21 Start: 18995, Stop: 19306, Start Num: 59

Candidate Starts for LilMcDreamy\_21:

(Start: 59 @18995 has 357 MA's), (75, 19064), (77, 19082), (83, 19118), (89, 19151), (104, 19235),

Gene: LilSmirk\_26 Start: 20481, Stop: 20834, Start Num: 59  
Candidate Starts for LilSmirk\_26:  
(20, 20256), (28, 20352), (Start: 59 @20481 has 357 MA's), (83, 20601), (92, 20667), (96, 20688),

Gene: LittleDigger\_21 Start: 17951, Stop: 18307, Start Num: 59  
Candidate Starts for LittleDigger\_21:  
(37, 17885), (41, 17900), (Start: 59 @17951 has 357 MA's), (Start: 64 @17960 has 2 MA's), (75, 18023), (77, 18041), (80, 18068), (81, 18071), (83, 18077),

Gene: LittleMinkey\_29 Start: 18938, Stop: 19261, Start Num: 59  
Candidate Starts for LittleMinkey\_29:  
(21, 18704), (22, 18707), (Start: 59 @18938 has 357 MA's), (83, 19061), (107, 19178),

Gene: LittleMunchkin\_23 Start: 19735, Stop: 20055, Start Num: 59  
Candidate Starts for LittleMunchkin\_23:  
(6, 19348), (11, 19393), (25, 19531), (27, 19576), (28, 19597), (Start: 59 @19735 has 357 MA's), (77, 19828), (80, 19855), (111, 20023),

Gene: LizLemon\_26 Start: 20598, Stop: 20954, Start Num: 59  
Candidate Starts for LizLemon\_26:  
(20, 20373), (28, 20469), (Start: 59 @20598 has 357 MA's), (83, 20718), (92, 20787), (96, 20808),

Gene: Lolalove\_22 Start: 18973, Stop: 19329, Start Num: 59  
Candidate Starts for Lolalove\_22:  
(37, 18907), (41, 18922), (46, 18937), (Start: 59 @18973 has 357 MA's), (Start: 64 @18982 has 2 MA's), (75, 19045), (77, 19063), (80, 19090), (81, 19093), (83, 19099),

Gene: Longacauda\_23 Start: 18047, Stop: 18376, Start Num: 59  
Candidate Starts for Longacauda\_23:  
(Start: 59 @18047 has 357 MA's), (Start: 64 @18056 has 2 MA's), (Start: 65 @18059 has 1 MA's), (75, 18116), (82, 18167), (107, 18284), (116, 18341),

Gene: Lopsy\_23 Start: 17911, Stop: 18231, Start Num: 64  
Candidate Starts for Lopsy\_23:  
(Start: 56 @17896 has 92 MA's), (Start: 59 @17902 has 357 MA's), (Start: 64 @17911 has 2 MA's), (Start: 65 @17914 has 1 MA's), (75, 17971), (82, 18022), (107, 18139), (116, 18196),

Gene: LostAndPhound\_23 Start: 18053, Stop: 18382, Start Num: 59  
Candidate Starts for LostAndPhound\_23:  
(Start: 56 @18047 has 92 MA's), (Start: 59 @18053 has 357 MA's), (Start: 64 @18062 has 2 MA's), (Start: 65 @18065 has 1 MA's), (75, 18122), (82, 18173), (107, 18290), (116, 18347),

Gene: Love\_32 Start: 23763, Stop: 24170, Start Num: 53  
Candidate Starts for Love\_32:  
(Start: 53 @23763 has 60 MA's), (Start: 64 @23784 has 2 MA's), (80, 23886), (99, 23961), (109, 24048), (119, 24099),

Gene: LuckyMarjie\_23 Start: 18066, Stop: 18395, Start Num: 59  
Candidate Starts for LuckyMarjie\_23:  
(Start: 56 @18060 has 92 MA's), (Start: 59 @18066 has 357 MA's), (Start: 64 @18075 has 2 MA's), (Start: 65 @18078 has 1 MA's), (75, 18135), (82, 18186), (107, 18303), (116, 18360),

Gene: Lulumae\_23 Start: 18038, Stop: 18373, Start Num: 56

Candidate Starts for Lulumae\_23:

(Start: 56 @18038 has 92 MA's), (Start: 59 @18044 has 357 MA's), (Start: 64 @18053 has 2 MA's),  
(Start: 65 @18056 has 1 MA's), (75, 18113), (82, 18164), (107, 18281), (116, 18338),

Gene: Lulwa\_24 Start: 18331, Stop: 18660, Start Num: 59

Candidate Starts for Lulwa\_24:

(Start: 56 @18325 has 92 MA's), (Start: 59 @18331 has 357 MA's), (Start: 64 @18340 has 2 MA's),  
(Start: 65 @18343 has 1 MA's), (75, 18400), (82, 18451), (107, 18568), (116, 18625),

Gene: Lumine\_23 Start: 18040, Stop: 18369, Start Num: 59

Candidate Starts for Lumine\_23:

(Start: 56 @18034 has 92 MA's), (Start: 59 @18040 has 357 MA's), (Start: 64 @18049 has 2 MA's),  
(Start: 65 @18052 has 1 MA's), (75, 18109), (82, 18160), (107, 18277), (116, 18334),

Gene: MRabcd\_23 Start: 18045, Stop: 18374, Start Num: 59

Candidate Starts for MRabcd\_23:

(Start: 56 @18039 has 92 MA's), (Start: 59 @18045 has 357 MA's), (Start: 64 @18054 has 2 MA's),  
(Start: 65 @18057 has 1 MA's), (75, 18114), (82, 18165), (107, 18282), (116, 18339),

Gene: Mag7\_23 Start: 17900, Stop: 18250, Start Num: 59

Candidate Starts for Mag7\_23:

(Start: 56 @17894 has 92 MA's), (Start: 59 @17900 has 357 MA's), (Start: 64 @17909 has 2 MA's),  
(Start: 65 @17912 has 1 MA's), (75, 17969), (82, 18020), (107, 18155), (116, 18212),

Gene: Magic8\_24 Start: 18338, Stop: 18688, Start Num: 59

Candidate Starts for Magic8\_24:

(Start: 56 @18332 has 92 MA's), (Start: 59 @18338 has 357 MA's), (Start: 64 @18347 has 2 MA's),  
(Start: 65 @18350 has 1 MA's), (75, 18407), (82, 18458), (107, 18593), (116, 18650),

Gene: Magpie\_21 Start: 18796, Stop: 19152, Start Num: 59

Candidate Starts for Magpie\_21:

(46, 18760), (Start: 59 @18796 has 357 MA's), (Start: 64 @18805 has 2 MA's), (75, 18868), (77,  
18886), (80, 18913), (81, 18916), (83, 18922),

Gene: Makar\_53 Start: 29122, Stop: 29466, Start Num: 58

Candidate Starts for Makar\_53:

(Start: 58 @29122 has 5 MA's), (86, 29272),

Gene: MakoManhole\_23 Start: 18284, Stop: 18625, Start Num: 59

Candidate Starts for MakoManhole\_23:

(Start: 59 @18284 has 357 MA's), (Start: 64 @18299 has 2 MA's), (75, 18362), (77, 18380), (82,  
18413), (105, 18548), (114, 18608),

Gene: Mana\_23 Start: 18047, Stop: 18376, Start Num: 59

Candidate Starts for Mana\_23:

(Start: 56 @18041 has 92 MA's), (Start: 59 @18047 has 357 MA's), (Start: 64 @18056 has 2 MA's),  
(Start: 65 @18059 has 1 MA's), (75, 18116), (82, 18167), (107, 18284), (116, 18341),

Gene: Manad\_23 Start: 17891, Stop: 18226, Start Num: 56

Candidate Starts for Manad\_23:

(Start: 56 @17891 has 92 MA's), (Start: 59 @17897 has 357 MA's), (Start: 64 @17906 has 2 MA's),  
(Start: 65 @17909 has 1 MA's), (75, 17966), (82, 18017), (107, 18134), (116, 18191),

Gene: Mariokart\_21 Start: 16793, Stop: 17122, Start Num: 59

Candidate Starts for Mariokart\_21:

(Start: 59 @16793 has 357 MA's), (Start: 64 @16808 has 2 MA's), (77, 16886), (82, 16919), (111, 17090),

Gene: Marley1013\_25 Start: 19790, Stop: 20164, Start Num: 59

Candidate Starts for Marley1013\_25:

(34, 19715), (37, 19724), (Start: 59 @19790 has 357 MA's), (Start: 64 @19805 has 2 MA's), (75, 19862), (76, 19868), (80, 19907), (83, 19916),

Gene: Marlia\_25 Start: 18992, Stop: 19363, Start Num: 59

Candidate Starts for Marlia\_25:

(34, 18917), (37, 18926), (Start: 59 @18992 has 357 MA's), (Start: 64 @19007 has 2 MA's), (75, 19064), (76, 19070), (80, 19109), (83, 19118),

Gene: Maru\_23 Start: 18046, Stop: 18375, Start Num: 59

Candidate Starts for Maru\_23:

(Start: 56 @18040 has 92 MA's), (Start: 59 @18046 has 357 MA's), (Start: 64 @18055 has 2 MA's), (Start: 65 @18058 has 1 MA's), (75, 18115), (82, 18166), (107, 18283), (116, 18340),

Gene: Maskar\_23 Start: 17893, Stop: 18222, Start Num: 59

Candidate Starts for Maskar\_23:

(Start: 59 @17893 has 357 MA's), (Start: 64 @17902 has 2 MA's), (Start: 65 @17905 has 1 MA's), (75, 17962), (82, 18013), (107, 18130), (116, 18187),

Gene: MasterPo\_26 Start: 20481, Stop: 20834, Start Num: 59

Candidate Starts for MasterPo\_26:

(15, 20208), (20, 20256), (28, 20352), (Start: 59 @20481 has 357 MA's), (83, 20601), (92, 20667), (96, 20688),

Gene: Matalotodo\_24 Start: 18339, Stop: 18668, Start Num: 59

Candidate Starts for Matalotodo\_24:

(Start: 56 @18333 has 92 MA's), (Start: 59 @18339 has 357 MA's), (Start: 64 @18348 has 2 MA's), (Start: 65 @18351 has 1 MA's), (75, 18408), (82, 18459), (107, 18576), (116, 18633),

Gene: McCrothy\_29 Start: 23562, Stop: 23978, Start Num: 53

Candidate Starts for McCrothy\_29:

(Start: 53 @23562 has 60 MA's), (Start: 64 @23583 has 2 MA's), (80, 23685), (99, 23760), (109, 23847), (119, 23898),

Gene: McKinley\_31 Start: 23795, Stop: 24202, Start Num: 53

Candidate Starts for McKinley\_31:

(Start: 53 @23795 has 60 MA's), (Start: 64 @23816 has 2 MA's), (80, 23918), (99, 23993), (109, 24080), (119, 24131),

Gene: Mcshane\_23 Start: 18036, Stop: 18371, Start Num: 56

Candidate Starts for Mcshane\_23:

(Start: 56 @18036 has 92 MA's), (Start: 59 @18042 has 357 MA's), (Start: 64 @18051 has 2 MA's), (Start: 65 @18054 has 1 MA's), (75, 18111), (82, 18162), (107, 18279), (116, 18336),

Gene: Mecca\_23 Start: 18039, Stop: 18368, Start Num: 59

Candidate Starts for Mecca\_23:

(Start: 56 @18033 has 92 MA's), (Start: 59 @18039 has 357 MA's), (Start: 64 @18048 has 2 MA's), (Start: 65 @18051 has 1 MA's), (75, 18108), (82, 18159), (107, 18276), (116, 18333),

Gene: Megabear\_18 Start: 17761, Stop: 18147, Start Num: 59

Candidate Starts for Megabear\_18:

(39, 17707), (Start: 59 @17761 has 357 MA's), (62, 17767), (Start: 64 @17773 has 2 MA's), (101, 18049),

Gene: Megamind20\_24 Start: 18054, Stop: 18389, Start Num: 56

Candidate Starts for Megamind20\_24:

(Start: 56 @18054 has 92 MA's), (Start: 59 @18060 has 357 MA's), (Start: 64 @18069 has 2 MA's), (Start: 65 @18072 has 1 MA's), (75, 18129), (82, 18180), (107, 18297), (116, 18354),

Gene: Megatron\_24 Start: 18343, Stop: 18672, Start Num: 59

Candidate Starts for Megatron\_24:

(Start: 56 @18337 has 92 MA's), (Start: 59 @18343 has 357 MA's), (Start: 64 @18352 has 2 MA's), (Start: 65 @18355 has 1 MA's), (75, 18412), (82, 18463), (107, 18580), (116, 18637),

Gene: MelBins\_28 Start: 21184, Stop: 21630, Start Num: 53

Candidate Starts for MelBins\_28:

(Start: 53 @21184 has 60 MA's), (Start: 59 @21196 has 357 MA's), (70, 21238), (72, 21253), (73, 21256), (78, 21289), (80, 21307), (93, 21376),

Gene: Melc17\_24 Start: 18335, Stop: 18664, Start Num: 59

Candidate Starts for Melc17\_24:

(Start: 59 @18335 has 357 MA's), (Start: 64 @18344 has 2 MA's), (Start: 65 @18347 has 1 MA's), (75, 18404), (82, 18455), (107, 18572), (116, 18629),

Gene: MelsMeow\_23 Start: 17900, Stop: 18250, Start Num: 59

Candidate Starts for MelsMeow\_23:

(Start: 56 @17894 has 92 MA's), (Start: 59 @17900 has 357 MA's), (Start: 64 @17909 has 2 MA's), (Start: 65 @17912 has 1 MA's), (75, 17969), (82, 18020), (107, 18155), (116, 18212),

Gene: Mesh1\_24 Start: 18345, Stop: 18680, Start Num: 56

Candidate Starts for Mesh1\_24:

(Start: 56 @18345 has 92 MA's), (Start: 59 @18351 has 357 MA's), (Start: 64 @18360 has 2 MA's), (Start: 65 @18363 has 1 MA's), (75, 18420), (82, 18471), (107, 18588), (116, 18645),

Gene: Mesmerelda\_23 Start: 18045, Stop: 18374, Start Num: 59

Candidate Starts for Mesmerelda\_23:

(Start: 56 @18039 has 92 MA's), (Start: 59 @18045 has 357 MA's), (Start: 64 @18054 has 2 MA's), (Start: 65 @18057 has 1 MA's), (75, 18114), (82, 18165), (107, 18282), (116, 18339),

Gene: MichaelPhcott\_23 Start: 17894, Stop: 18250, Start Num: 56

Candidate Starts for MichaelPhcott\_23:

(Start: 56 @17894 has 92 MA's), (Start: 59 @17900 has 357 MA's), (Start: 64 @17909 has 2 MA's), (Start: 65 @17912 has 1 MA's), (75, 17969), (82, 18020), (107, 18155), (116, 18212),

Gene: Mikota\_24 Start: 18327, Stop: 18656, Start Num: 59

Candidate Starts for Mikota\_24:

(Start: 56 @18321 has 92 MA's), (Start: 59 @18327 has 357 MA's), (Start: 64 @18336 has 2 MA's), (Start: 65 @18339 has 1 MA's), (75, 18396), (82, 18447), (107, 18564), (116, 18621),

Gene: MiniBoss\_24 Start: 18330, Stop: 18659, Start Num: 59

Candidate Starts for MiniBoss\_24:

(Start: 56 @18324 has 92 MA's), (Start: 59 @18330 has 357 MA's), (Start: 64 @18339 has 2 MA's), (Start: 65 @18342 has 1 MA's), (75, 18399), (82, 18450), (107, 18567), (116, 18624),

Gene: MitKao\_24 Start: 18042, Stop: 18377, Start Num: 56

Candidate Starts for MitKao\_24:

(Start: 56 @18042 has 92 MA's), (Start: 59 @18048 has 357 MA's), (Start: 64 @18057 has 2 MA's), (Start: 65 @18060 has 1 MA's), (75, 18117), (82, 18168), (107, 18285), (116, 18342),

Gene: Mithril\_22 Start: 18977, Stop: 19333, Start Num: 59

Candidate Starts for Mithril\_22:

(37, 18911), (41, 18926), (46, 18941), (Start: 59 @18977 has 357 MA's), (Start: 64 @18986 has 2 MA's), (75, 19049), (77, 19067), (80, 19094), (81, 19097), (83, 19103),

Gene: MmasiCarm\_25 Start: 19003, Stop: 19374, Start Num: 59

Candidate Starts for MmasiCarm\_25:

(34, 18928), (37, 18937), (Start: 59 @19003 has 357 MA's), (Start: 64 @19018 has 2 MA's), (75, 19075), (76, 19081), (80, 19120), (83, 19129),

Gene: MoontowerMania\_28 Start: 22606, Stop: 23013, Start Num: 53

Candidate Starts for MoontowerMania\_28:

(Start: 53 @22606 has 60 MA's), (Start: 64 @22627 has 2 MA's), (80, 22729), (99, 22804), (109, 22891),

Gene: Morgushi\_24 Start: 18047, Stop: 18382, Start Num: 56

Candidate Starts for Morgushi\_24:

(Start: 56 @18047 has 92 MA's), (Start: 59 @18053 has 357 MA's), (Start: 64 @18062 has 2 MA's), (Start: 65 @18065 has 1 MA's), (75, 18122), (82, 18173), (107, 18290), (116, 18347),

Gene: Mortcellus\_24 Start: 19646, Stop: 20017, Start Num: 59

Candidate Starts for Mortcellus\_24:

(34, 19571), (37, 19580), (Start: 59 @19646 has 357 MA's), (Start: 64 @19661 has 2 MA's), (75, 19718), (76, 19724), (80, 19763), (83, 19772),

Gene: Morty\_24 Start: 18352, Stop: 18681, Start Num: 59

Candidate Starts for Morty\_24:

(Start: 56 @18346 has 92 MA's), (Start: 59 @18352 has 357 MA's), (Start: 64 @18361 has 2 MA's), (Start: 65 @18364 has 1 MA's), (75, 18421), (82, 18472), (107, 18589), (116, 18646),

Gene: Morty007\_25 Start: 19790, Stop: 20164, Start Num: 59

Candidate Starts for Morty007\_25:

(34, 19715), (37, 19724), (Start: 59 @19790 has 357 MA's), (Start: 64 @19805 has 2 MA's), (75, 19862), (76, 19868), (80, 19907), (83, 19916),

Gene: Mosaic\_23 Start: 18048, Stop: 18383, Start Num: 56

Candidate Starts for Mosaic\_23:

(Start: 56 @18048 has 92 MA's), (Start: 59 @18054 has 357 MA's), (Start: 64 @18063 has 2 MA's), (Start: 65 @18066 has 1 MA's), (75, 18123), (82, 18174), (107, 18291), (116, 18348),

Gene: MossRose\_23 Start: 18263, Stop: 18604, Start Num: 59

Candidate Starts for MossRose\_23:

(Start: 59 @18263 has 357 MA's), (Start: 64 @18278 has 2 MA's), (75, 18341), (77, 18359), (82, 18392), (105, 18527), (114, 18587),

Gene: MrPhizzler\_24 Start: 18054, Stop: 18383, Start Num: 59

Candidate Starts for MrPhizzler\_24:

(Start: 59 @18054 has 357 MA's), (Start: 64 @18063 has 2 MA's), (Start: 65 @18066 has 1 MA's), (75, 18123), (82, 18174), (107, 18291), (116, 18348),

Gene: Mudslide\_22 Start: 19224, Stop: 19580, Start Num: 59

Candidate Starts for Mudslide\_22:

(19, 18981), (37, 19158), (41, 19173), (46, 19188), (Start: 59 @19224 has 357 MA's), (Start: 64 @19233 has 2 MA's), (75, 19296), (77, 19314), (80, 19341), (81, 19344), (83, 19350),

Gene: Mulan\_23 Start: 18048, Stop: 18377, Start Num: 59

Candidate Starts for Mulan\_23:

(Start: 56 @18042 has 92 MA's), (Start: 59 @18048 has 357 MA's), (Start: 64 @18057 has 2 MA's), (Start: 65 @18060 has 1 MA's), (75, 18117), (82, 18168), (107, 18285), (116, 18342),

Gene: Mulaychimus\_25 Start: 18985, Stop: 19356, Start Num: 59

Candidate Starts for Mulaychimus\_25:

(34, 18910), (37, 18919), (Start: 59 @18985 has 357 MA's), (Start: 64 @19000 has 2 MA's), (75, 19057), (76, 19063), (80, 19102), (83, 19111),

Gene: Murdoc\_24 Start: 18335, Stop: 18670, Start Num: 56

Candidate Starts for Murdoc\_24:

(Start: 56 @18335 has 92 MA's), (Start: 59 @18341 has 357 MA's), (Start: 64 @18350 has 2 MA's), (Start: 65 @18353 has 1 MA's), (75, 18410), (82, 18461), (107, 18578), (116, 18635),

Gene: Mutante\_23 Start: 18051, Stop: 18380, Start Num: 59

Candidate Starts for Mutante\_23:

(Start: 56 @18045 has 92 MA's), (Start: 59 @18051 has 357 MA's), (Start: 64 @18060 has 2 MA's), (Start: 65 @18063 has 1 MA's), (75, 18120), (82, 18171), (107, 18288), (116, 18345),

Gene: Mysterious\_24 Start: 19308, Stop: 19640, Start Num: 59

Candidate Starts for Mysterious\_24:

(Start: 55 @19302 has 2 MA's), (Start: 59 @19308 has 357 MA's), (75, 19377), (77, 19395), (79, 19407), (83, 19431),

Gene: NHagos\_21 Start: 16805, Stop: 17149, Start Num: 59

Candidate Starts for NHagos\_21:

(Start: 59 @16805 has 357 MA's), (Start: 64 @16820 has 2 MA's), (75, 16883), (77, 16901),

Gene: Nacho\_0024 Start: 18334, Stop: 18669, Start Num: 56

Candidate Starts for Nacho\_0024:

(Start: 56 @18334 has 92 MA's), (Start: 59 @18340 has 357 MA's), (Start: 64 @18349 has 2 MA's), (Start: 65 @18352 has 1 MA's), (75, 18409), (82, 18460), (107, 18577), (116, 18634),

Gene: Nanao\_21 Start: 17943, Stop: 18299, Start Num: 59

Candidate Starts for Nanao\_21:

(37, 17877), (41, 17892), (Start: 59 @17943 has 357 MA's), (Start: 64 @17952 has 2 MA's), (75, 18015), (77, 18033), (80, 18060), (81, 18063), (83, 18069),

Gene: Nangang\_24 Start: 19007, Stop: 19342, Start Num: 59

Candidate Starts for Nangang\_24:

(37, 18941), (Start: 55 @19001 has 2 MA's), (Start: 59 @19007 has 357 MA's), (75, 19076), (81, 19124), (83, 19130),

Gene: Nathan\_24 Start: 18353, Stop: 18700, Start Num: 59

Candidate Starts for Nathan\_24:

(Start: 56 @18347 has 92 MA's), (Start: 59 @18353 has 357 MA's), (Start: 64 @18362 has 2 MA's), (Start: 65 @18365 has 1 MA's), (75, 18422), (82, 18473), (116, 18665),

Gene: Natkenzie\_29 Start: 22570, Stop: 22980, Start Num: 57

Candidate Starts for Natkenzie\_29:

(Start: 57 @22570 has 9 MA's), (Start: 64 @22582 has 2 MA's), (72, 22630), (73, 22633), (77, 22657), (81, 22687), (94, 22744), (102, 22804),

Gene: Nehemiah\_23 Start: 19302, Stop: 19640, Start Num: 55

Candidate Starts for Nehemiah\_23:

(Start: 55 @19302 has 2 MA's), (Start: 59 @19308 has 357 MA's), (75, 19377), (79, 19407), (83, 19431),

Gene: Neos5\_25 Start: 19800, Stop: 20171, Start Num: 59

Candidate Starts for Neos5\_25:

(34, 19725), (37, 19734), (Start: 59 @19800 has 357 MA's), (Start: 64 @19815 has 2 MA's), (75, 19872), (76, 19878), (80, 19917), (83, 19926),

Gene: Newman\_24 Start: 18340, Stop: 18669, Start Num: 59

Candidate Starts for Newman\_24:

(Start: 56 @18334 has 92 MA's), (Start: 59 @18340 has 357 MA's), (Start: 64 @18349 has 2 MA's), (Start: 65 @18352 has 1 MA's), (75, 18409), (82, 18460), (107, 18577), (116, 18634),

Gene: Nicole21\_24 Start: 18332, Stop: 18661, Start Num: 59

Candidate Starts for Nicole21\_24:

(Start: 56 @18326 has 92 MA's), (Start: 59 @18332 has 357 MA's), (Start: 64 @18341 has 2 MA's), (Start: 65 @18344 has 1 MA's), (75, 18401), (82, 18452), (107, 18569), (116, 18626),

Gene: Nigel\_20 Start: 17827, Stop: 18183, Start Num: 59

Candidate Starts for Nigel\_20:

(45, 17785), (Start: 59 @17827 has 357 MA's), (77, 17917), (80, 17944), (81, 17947), (83, 17953), (87, 17986), (88, 17998), (98, 18043), (120, 18175),

Gene: Nordenberg\_23 Start: 21965, Stop: 22372, Start Num: 53

Candidate Starts for Nordenberg\_23:

(Start: 53 @21965 has 60 MA's), (Start: 64 @21986 has 2 MA's), (80, 22088), (99, 22163), (109, 22250), (119, 22301),

Gene: Nozo\_25 Start: 19770, Stop: 20141, Start Num: 59

Candidate Starts for Nozo\_25:

(34, 19695), (37, 19704), (Start: 59 @19770 has 357 MA's), (Start: 64 @19785 has 2 MA's), (75, 19842), (76, 19848), (80, 19887), (83, 19896),

Gene: Numberten\_24 Start: 18339, Stop: 18674, Start Num: 56

Candidate Starts for Numberten\_24:

(Start: 56 @18339 has 92 MA's), (Start: 59 @18345 has 357 MA's), (Start: 64 @18354 has 2 MA's), (Start: 65 @18357 has 1 MA's), (75, 18414), (82, 18465), (107, 18582), (116, 18639),

Gene: Nyala\_23 Start: 18043, Stop: 18372, Start Num: 59

Candidate Starts for Nyala\_23:

(Start: 56 @18037 has 92 MA's), (Start: 59 @18043 has 357 MA's), (Start: 64 @18052 has 2 MA's),  
(Start: 65 @18055 has 1 MA's), (75, 18112), (82, 18163), (107, 18280), (116, 18337),

Gene: OSmaximus\_24 Start: 18346, Stop: 18699, Start Num: 56

Candidate Starts for OSmaximus\_24:

(Start: 56 @18346 has 92 MA's), (Start: 59 @18352 has 357 MA's), (Start: 64 @18361 has 2 MA's),  
(Start: 65 @18364 has 1 MA's), (75, 18421), (82, 18472), (107, 18607), (116, 18664),

Gene: Obutu\_25 Start: 19003, Stop: 19374, Start Num: 59

Candidate Starts for Obutu\_25:

(34, 18928), (37, 18937), (Start: 59 @19003 has 357 MA's), (Start: 64 @19018 has 2 MA's), (75,  
19075), (76, 19081), (80, 19120), (83, 19129),

Gene: Olak\_23 Start: 18038, Stop: 18373, Start Num: 56

Candidate Starts for Olak\_23:

(Start: 56 @18038 has 92 MA's), (Start: 59 @18044 has 357 MA's), (Start: 64 @18053 has 2 MA's),  
(Start: 65 @18056 has 1 MA's), (75, 18113), (82, 18164), (107, 18281), (116, 18338),

Gene: Oline\_23 Start: 17907, Stop: 18236, Start Num: 59

Candidate Starts for Oline\_23:

(Start: 59 @17907 has 357 MA's), (Start: 64 @17916 has 2 MA's), (Start: 65 @17919 has 1 MA's), (75,  
17976), (82, 18027), (107, 18144), (116, 18201),

Gene: Olive\_24 Start: 18333, Stop: 18662, Start Num: 59

Candidate Starts for Olive\_24:

(Start: 56 @18327 has 92 MA's), (Start: 59 @18333 has 357 MA's), (Start: 64 @18342 has 2 MA's),  
(Start: 65 @18345 has 1 MA's), (75, 18402), (82, 18453), (107, 18570), (116, 18627),

Gene: OliverWalter\_24 Start: 18349, Stop: 18678, Start Num: 59

Candidate Starts for OliverWalter\_24:

(Start: 56 @18343 has 92 MA's), (Start: 59 @18349 has 357 MA's), (Start: 64 @18358 has 2 MA's),  
(Start: 65 @18361 has 1 MA's), (75, 18418), (82, 18469), (107, 18586), (116, 18643),

Gene: Olivio\_24 Start: 18857, Stop: 19228, Start Num: 59

Candidate Starts for Olivio\_24:

(34, 18782), (37, 18791), (Start: 59 @18857 has 357 MA's), (Start: 64 @18872 has 2 MA's), (75,  
18929), (76, 18935), (80, 18974), (83, 18983),

Gene: Omniscient\_24 Start: 18352, Stop: 18681, Start Num: 59

Candidate Starts for Omniscient\_24:

(Start: 56 @18346 has 92 MA's), (Start: 59 @18352 has 357 MA's), (Start: 64 @18361 has 2 MA's),  
(Start: 65 @18364 has 1 MA's), (75, 18421), (82, 18472), (107, 18589), (116, 18646),

Gene: OneBrain\_24 Start: 18045, Stop: 18374, Start Num: 59

Candidate Starts for OneBrain\_24:

(Start: 59 @18045 has 357 MA's), (Start: 64 @18054 has 2 MA's), (Start: 65 @18057 has 1 MA's), (75,  
18114), (82, 18165), (107, 18282), (116, 18339),

Gene: Oosterbaan\_24 Start: 18338, Stop: 18673, Start Num: 56

Candidate Starts for Oosterbaan\_24:

(Start: 56 @18338 has 92 MA's), (Start: 59 @18344 has 357 MA's), (Start: 64 @18353 has 2 MA's),  
(Start: 65 @18356 has 1 MA's), (75, 18413), (82, 18464), (107, 18581), (116, 18638),

Gene: Opia\_26 Start: 20481, Stop: 20834, Start Num: 59

Candidate Starts for Opia\_26:

(15, 20208), (20, 20256), (28, 20352), (Start: 59 @20481 has 357 MA's), (83, 20601), (92, 20667), (96, 20688),

Gene: OrangeOswald\_25 Start: 19008, Stop: 19379, Start Num: 59

Candidate Starts for OrangeOswald\_25:

(34, 18933), (37, 18942), (Start: 59 @19008 has 357 MA's), (Start: 64 @19023 has 2 MA's), (75, 19080), (76, 19086), (80, 19125), (83, 19134),

Gene: Orfeu\_23 Start: 18045, Stop: 18374, Start Num: 59

Candidate Starts for Orfeu\_23:

(28, 17901), (42, 17997), (Start: 56 @18039 has 92 MA's), (Start: 59 @18045 has 357 MA's), (Start: 64 @18054 has 2 MA's), (Start: 65 @18057 has 1 MA's), (75, 18114), (82, 18165), (107, 18282), (116, 18339),

Gene: Orion\_24 Start: 18335, Stop: 18670, Start Num: 56

Candidate Starts for Orion\_24:

(Start: 56 @18335 has 92 MA's), (Start: 59 @18341 has 357 MA's), (Start: 64 @18350 has 2 MA's),  
(Start: 65 @18353 has 1 MA's), (75, 18410), (82, 18461), (107, 18578), (116, 18635),

Gene: Orwigg\_23 Start: 18032, Stop: 18367, Start Num: 56

Candidate Starts for Orwigg\_23:

(Start: 56 @18032 has 92 MA's), (Start: 59 @18038 has 357 MA's), (Start: 64 @18047 has 2 MA's),  
(Start: 65 @18050 has 1 MA's), (75, 18107), (82, 18158), (107, 18275), (116, 18332),

Gene: PG1\_24 Start: 18348, Stop: 18683, Start Num: 56

Candidate Starts for PG1\_24:

(Start: 56 @18348 has 92 MA's), (Start: 59 @18354 has 357 MA's), (Start: 64 @18363 has 2 MA's),  
(Start: 65 @18366 has 1 MA's), (75, 18423), (82, 18474), (107, 18591), (116, 18648),

Gene: PR\_18 Start: 17788, Stop: 18174, Start Num: 59

Candidate Starts for PR\_18:

(39, 17734), (Start: 59 @17788 has 357 MA's), (62, 17794), (Start: 64 @17800 has 2 MA's), (101, 18076),

Gene: Pacifista\_23 Start: 18045, Stop: 18374, Start Num: 59

Candidate Starts for Pacifista\_23:

(Start: 56 @18039 has 92 MA's), (Start: 59 @18045 has 357 MA's), (Start: 64 @18054 has 2 MA's),  
(Start: 65 @18057 has 1 MA's), (75, 18114), (82, 18165), (107, 18282), (116, 18339),

Gene: PallasAthena\_24 Start: 18046, Stop: 18381, Start Num: 56

Candidate Starts for PallasAthena\_24:

(Start: 56 @18046 has 92 MA's), (Start: 59 @18052 has 357 MA's), (Start: 64 @18061 has 2 MA's),  
(Start: 65 @18064 has 1 MA's), (75, 18121), (82, 18172), (107, 18289), (116, 18346),

Gene: Paries\_31 Start: 23422, Stop: 23838, Start Num: 53

Candidate Starts for Paries\_31:

(Start: 53 @23422 has 60 MA's), (Start: 64 @23443 has 2 MA's), (80, 23545), (99, 23620), (109, 23707), (119, 23758),

Gene: PenguinLover67\_26 Start: 20575, Stop: 20904, Start Num: 59

Candidate Starts for PenguinLover67\_26:

(Start: 59 @20575 has 357 MA's), (77, 20662), (82, 20695),

Gene: Phaedrus\_23 Start: 18924, Stop: 19295, Start Num: 59

Candidate Starts for Phaedrus\_23:

(34, 18849), (37, 18858), (Start: 59 @18924 has 357 MA's), (Start: 64 @18939 has 2 MA's), (75, 18996), (76, 19002), (80, 19041), (83, 19050),

Gene: Phamished\_24 Start: 18349, Stop: 18678, Start Num: 59

Candidate Starts for Phamished\_24:

(Start: 56 @18343 has 92 MA's), (Start: 59 @18349 has 357 MA's), (Start: 64 @18358 has 2 MA's), (Start: 65 @18361 has 1 MA's), (75, 18418), (82, 18469), (107, 18586), (116, 18643),

Gene: Phantasmagoria\_26 Start: 20477, Stop: 20830, Start Num: 59

Candidate Starts for Phantasmagoria\_26:

(15, 20204), (20, 20252), (28, 20348), (Start: 59 @20477 has 357 MA's), (83, 20597), (92, 20663), (96, 20684),

Gene: Phareon\_24 Start: 18049, Stop: 18378, Start Num: 59

Candidate Starts for Phareon\_24:

(Start: 56 @18043 has 92 MA's), (Start: 59 @18049 has 357 MA's), (Start: 64 @18058 has 2 MA's), (Start: 65 @18061 has 1 MA's), (75, 18118), (82, 18169), (107, 18286), (116, 18343),

Gene: PhatCats2014\_24 Start: 18353, Stop: 18688, Start Num: 56

Candidate Starts for PhatCats2014\_24:

(Start: 56 @18353 has 92 MA's), (Start: 59 @18359 has 357 MA's), (Start: 64 @18368 has 2 MA's), (Start: 65 @18371 has 1 MA's), (75, 18428), (82, 18479), (107, 18596), (116, 18653),

Gene: PhatLouie\_24 Start: 18342, Stop: 18671, Start Num: 59

Candidate Starts for PhatLouie\_24:

(Start: 59 @18342 has 357 MA's), (Start: 64 @18351 has 2 MA's), (Start: 65 @18354 has 1 MA's), (75, 18411), (82, 18462), (107, 18579), (116, 18636),

Gene: Phauci\_20 Start: 17577, Stop: 18011, Start Num: 59

Candidate Starts for Phauci\_20:

(Start: 53 @17565 has 60 MA's), (Start: 59 @17577 has 357 MA's), (Start: 64 @17586 has 2 MA's), (70, 17619), (72, 17634), (73, 17637), (80, 17688),

Gene: Phayeta\_25 Start: 18884, Stop: 19255, Start Num: 59

Candidate Starts for Phayeta\_25:

(34, 18809), (37, 18818), (Start: 59 @18884 has 357 MA's), (Start: 64 @18899 has 2 MA's), (75, 18956), (76, 18962), (80, 19001), (83, 19010),

Gene: Phelemich\_24 Start: 19298, Stop: 19636, Start Num: 55

Candidate Starts for Phelemich\_24:

(Start: 55 @19298 has 2 MA's), (Start: 59 @19304 has 357 MA's), (75, 19373), (77, 19391), (79, 19403), (83, 19427),

Gene: PhenghisKhan\_23 Start: 17894, Stop: 18250, Start Num: 56

Candidate Starts for PhenghisKhan\_23:

(Start: 56 @17894 has 92 MA's), (Start: 59 @17900 has 357 MA's), (Start: 64 @17909 has 2 MA's),  
(Start: 65 @17912 has 1 MA's), (75, 17969), (82, 18020), (107, 18155), (116, 18212),

Gene: Pherdinand\_24 Start: 18349, Stop: 18678, Start Num: 59

Candidate Starts for Pherdinand\_24:

(Start: 56 @18343 has 92 MA's), (Start: 59 @18349 has 357 MA's), (Start: 64 @18358 has 2 MA's),  
(Start: 65 @18361 has 1 MA's), (75, 18418), (82, 18469), (107, 18586), (116, 18643),

Gene: Phergie\_23 Start: 17894, Stop: 18244, Start Num: 59

Candidate Starts for Phergie\_23:

(Start: 56 @17888 has 92 MA's), (Start: 59 @17894 has 357 MA's), (Start: 64 @17903 has 2 MA's),  
(Start: 65 @17906 has 1 MA's), (75, 17963), (82, 18014), (107, 18149), (116, 18206),

Gene: Philly\_24 Start: 18874, Stop: 19245, Start Num: 59

Candidate Starts for Philly\_24:

(34, 18799), (37, 18808), (Start: 59 @18874 has 357 MA's), (Start: 64 @18889 has 2 MA's), (75,  
18946), (76, 18952), (80, 18991), (83, 19000),

Gene: Phinally\_27 Start: 20973, Stop: 21419, Start Num: 53

Candidate Starts for Phinally\_27:

(Start: 53 @20973 has 60 MA's), (Start: 59 @20985 has 357 MA's), (Start: 64 @20994 has 2 MA's),  
(70, 21027), (73, 21045), (80, 21096), (93, 21165), (103, 21243),

Gene: Phipps\_24 Start: 18313, Stop: 18648, Start Num: 56

Candidate Starts for Phipps\_24:

(Start: 56 @18313 has 92 MA's), (Start: 59 @18319 has 357 MA's), (Start: 64 @18328 has 2 MA's),  
(Start: 65 @18331 has 1 MA's), (75, 18388), (82, 18439), (107, 18556), (116, 18613),

Gene: Phleuron\_23 Start: 17900, Stop: 18250, Start Num: 59

Candidate Starts for Phleuron\_23:

(Start: 56 @17894 has 92 MA's), (Start: 59 @17900 has 357 MA's), (Start: 64 @17909 has 2 MA's),  
(Start: 65 @17912 has 1 MA's), (75, 17969), (82, 18020), (107, 18155), (116, 18212),

Gene: Phlyer\_25 Start: 19743, Stop: 20114, Start Num: 59

Candidate Starts for Phlyer\_25:

(34, 19668), (37, 19677), (Start: 59 @19743 has 357 MA's), (Start: 64 @19758 has 2 MA's), (75,  
19815), (76, 19821), (80, 19860), (83, 19869),

Gene: PhrankReynolds\_23 Start: 17894, Stop: 18250, Start Num: 56

Candidate Starts for PhrankReynolds\_23:

(Start: 56 @17894 has 92 MA's), (Start: 59 @17900 has 357 MA's), (Start: 64 @17909 has 2 MA's),  
(Start: 65 @17912 has 1 MA's), (75, 17969), (82, 18020), (107, 18155), (116, 18212),

Gene: PhrodoBaggins\_23 Start: 18337, Stop: 18666, Start Num: 59

Candidate Starts for PhrodoBaggins\_23:

(Start: 56 @18331 has 92 MA's), (Start: 59 @18337 has 357 MA's), (Start: 64 @18346 has 2 MA's),  
(Start: 65 @18349 has 1 MA's), (75, 18406), (82, 18457), (107, 18574), (116, 18631),

Gene: Phunky\_24 Start: 18343, Stop: 18672, Start Num: 59

Candidate Starts for Phunky\_24:

(Start: 56 @18337 has 92 MA's), (Start: 59 @18343 has 357 MA's), (Start: 64 @18352 has 2 MA's),  
(Start: 65 @18355 has 1 MA's), (75, 18412), (82, 18463), (107, 18580), (116, 18637),

Gene: Piglet\_0023 Start: 18337, Stop: 18672, Start Num: 56

Candidate Starts for Piglet\_0023:

(Start: 56 @18337 has 92 MA's), (Start: 59 @18343 has 357 MA's), (Start: 64 @18352 has 2 MA's), (Start: 65 @18355 has 1 MA's), (75, 18412), (82, 18463), (107, 18580), (116, 18637),

Gene: Pine5\_24 Start: 19184, Stop: 19603, Start Num: 59

Candidate Starts for Pine5\_24:

(15, 18896), (18, 18938), (28, 19037), (33, 19076), (Start: 59 @19184 has 357 MA's), (63, 19196), (78, 19286), (117, 19565),

Gene: PinheadLarry\_24 Start: 18054, Stop: 18389, Start Num: 56

Candidate Starts for PinheadLarry\_24:

(Start: 56 @18054 has 92 MA's), (Start: 59 @18060 has 357 MA's), (Start: 64 @18069 has 2 MA's), (Start: 65 @18072 has 1 MA's), (75, 18129), (82, 18180), (107, 18297), (116, 18354),

Gene: Pinkman\_23 Start: 17901, Stop: 18230, Start Num: 59

Candidate Starts for Pinkman\_23:

(Start: 59 @17901 has 357 MA's), (Start: 64 @17910 has 2 MA's), (Start: 65 @17913 has 1 MA's), (75, 17970), (82, 18021), (107, 18138), (116, 18195),

Gene: Pipefish\_25 Start: 19890, Stop: 20264, Start Num: 59

Candidate Starts for Pipefish\_25:

(34, 19815), (37, 19824), (Start: 59 @19890 has 357 MA's), (Start: 64 @19905 has 2 MA's), (75, 19962), (76, 19968), (80, 20007), (83, 20016),

Gene: Pipsqueak\_24 Start: 18343, Stop: 18678, Start Num: 56

Candidate Starts for Pipsqueak\_24:

(Start: 56 @18343 has 92 MA's), (Start: 59 @18349 has 357 MA's), (Start: 64 @18358 has 2 MA's), (Start: 65 @18361 has 1 MA's), (75, 18418), (82, 18469), (107, 18586), (116, 18643),

Gene: Placalicious\_23 Start: 18042, Stop: 18371, Start Num: 59

Candidate Starts for Placalicious\_23:

(Start: 56 @18036 has 92 MA's), (Start: 59 @18042 has 357 MA's), (Start: 64 @18051 has 2 MA's), (Start: 65 @18054 has 1 MA's), (75, 18111), (82, 18162), (107, 18279), (116, 18336),

Gene: Plata\_24 Start: 18057, Stop: 18386, Start Num: 59

Candidate Starts for Plata\_24:

(Start: 59 @18057 has 357 MA's), (Start: 64 @18066 has 2 MA's), (Start: 65 @18069 has 1 MA's), (75, 18126), (82, 18177), (107, 18294), (116, 18351),

Gene: Plmatters\_24 Start: 18346, Stop: 18675, Start Num: 59

Candidate Starts for Plmatters\_24:

(Start: 56 @18340 has 92 MA's), (Start: 59 @18346 has 357 MA's), (Start: 64 @18355 has 2 MA's), (Start: 65 @18358 has 1 MA's), (75, 18415), (82, 18466), (107, 18583), (116, 18640),

Gene: Podrick\_24 Start: 18332, Stop: 18667, Start Num: 56

Candidate Starts for Podrick\_24:

(Start: 56 @18332 has 92 MA's), (Start: 59 @18338 has 357 MA's), (Start: 64 @18347 has 2 MA's), (Start: 65 @18350 has 1 MA's), (75, 18407), (82, 18458), (107, 18575), (116, 18632),

Gene: Pops\_24 Start: 18346, Stop: 18675, Start Num: 59

Candidate Starts for Pops\_24:

(Start: 56 @18340 has 92 MA's), (Start: 59 @18346 has 357 MA's), (Start: 64 @18355 has 2 MA's), (Start: 65 @18358 has 1 MA's), (75, 18415), (82, 18466), (107, 18583), (116, 18640),

Gene: Poster\_21 Start: 17944, Stop: 18300, Start Num: 59

Candidate Starts for Poster\_21:

(37, 17878), (41, 17893), (Start: 59 @17944 has 357 MA's), (Start: 64 @17953 has 2 MA's), (75, 18016), (77, 18034), (80, 18061), (81, 18064), (83, 18070),

Gene: Potter\_23 Start: 18056, Stop: 18385, Start Num: 59

Candidate Starts for Potter\_23:

(Start: 56 @18050 has 92 MA's), (Start: 59 @18056 has 357 MA's), (Start: 64 @18065 has 2 MA's), (Start: 65 @18068 has 1 MA's), (75, 18125), (82, 18176), (107, 18293), (116, 18350),

Gene: Prickles\_24 Start: 18329, Stop: 18664, Start Num: 56

Candidate Starts for Prickles\_24:

(Start: 56 @18329 has 92 MA's), (Start: 59 @18335 has 357 MA's), (Start: 64 @18344 has 2 MA's), (Start: 65 @18347 has 1 MA's), (75, 18404), (82, 18455), (107, 18572), (116, 18629),

Gene: Prince\_22 Start: 19136, Stop: 19492, Start Num: 59

Candidate Starts for Prince\_22:

(31, 19001), (37, 19070), (41, 19085), (46, 19100), (Start: 59 @19136 has 357 MA's), (Start: 64 @19145 has 2 MA's), (75, 19208), (77, 19226), (80, 19253), (81, 19256), (83, 19262),

Gene: PrinceCharming\_26 Start: 20597, Stop: 20950, Start Num: 59

Candidate Starts for PrinceCharming\_26:

(15, 20324), (20, 20372), (28, 20468), (Start: 59 @20597 has 357 MA's), (83, 20717), (92, 20783), (96, 20804),

Gene: ProfessorX\_24 Start: 18327, Stop: 18662, Start Num: 56

Candidate Starts for ProfessorX\_24:

(Start: 56 @18327 has 92 MA's), (Start: 59 @18333 has 357 MA's), (Start: 64 @18342 has 2 MA's), (Start: 65 @18345 has 1 MA's), (75, 18402), (82, 18453), (107, 18570), (116, 18627),

Gene: Puhltonio\_24 Start: 18343, Stop: 18678, Start Num: 56

Candidate Starts for Puhltonio\_24:

(Start: 56 @18343 has 92 MA's), (Start: 59 @18349 has 357 MA's), (Start: 64 @18358 has 2 MA's), (Start: 65 @18361 has 1 MA's), (75, 18418), (82, 18469), (107, 18586), (116, 18643),

Gene: Pumpkiney\_30 Start: 19890, Stop: 20300, Start Num: 57

Candidate Starts for Pumpkiney\_30:

(Start: 57 @19890 has 9 MA's), (Start: 64 @19902 has 2 MA's), (72, 19950), (73, 19953), (81, 20007), (94, 20064),

Gene: Purplicious\_51 Start: 28428, Stop: 28781, Start Num: 59

Candidate Starts for Purplicious\_51:

(Start: 59 @28428 has 357 MA's), (73, 28488),

Gene: QueenBeane\_24 Start: 18335, Stop: 18670, Start Num: 56

Candidate Starts for QueenBeane\_24:

(Start: 56 @18335 has 92 MA's), (Start: 59 @18341 has 357 MA's), (Start: 64 @18350 has 2 MA's), (Start: 65 @18353 has 1 MA's), (75, 18410), (82, 18461), (107, 18578), (116, 18635),

Gene: QueenPie\_21 Start: 19142, Stop: 19495, Start Num: 59

Candidate Starts for QueenPie\_21:

(37, 19076), (41, 19091), (46, 19106), (Start: 59 @19142 has 357 MA's), (Start: 64 @19151 has 2 MA's), (75, 19214), (77, 19232), (81, 19262), (83, 19268), (107, 19430),

Gene: Quesadilla\_25 Start: 20474, Stop: 20803, Start Num: 59

Candidate Starts for Quesadilla\_25:

(Start: 59 @20474 has 357 MA's), (81, 20591), (83, 20597), (95, 20645),

Gene: Quisquilliae\_24 Start: 18356, Stop: 18685, Start Num: 59

Candidate Starts for Quisquilliae\_24:

(Start: 56 @18350 has 92 MA's), (Start: 59 @18356 has 357 MA's), (Start: 64 @18365 has 2 MA's), (Start: 65 @18368 has 1 MA's), (75, 18425), (82, 18476), (107, 18593), (116, 18650),

Gene: Qyrzula\_24 Start: 20567, Stop: 20920, Start Num: 59

Candidate Starts for Qyrzula\_24:

(20, 20342), (28, 20438), (Start: 59 @20567 has 357 MA's), (83, 20687), (92, 20753), (96, 20774),

Gene: RagingRooster\_25 Start: 19009, Stop: 19380, Start Num: 59

Candidate Starts for RagingRooster\_25:

(34, 18934), (37, 18943), (Start: 59 @19009 has 357 MA's), (Start: 64 @19024 has 2 MA's), (75, 19081), (76, 19087), (80, 19126), (83, 19135),

Gene: RawrgerThat\_22 Start: 18973, Stop: 19329, Start Num: 59

Candidate Starts for RawrgerThat\_22:

(31, 18838), (37, 18907), (41, 18922), (46, 18937), (Start: 59 @18973 has 357 MA's), (Start: 64 @18982 has 2 MA's), (75, 19045), (77, 19063), (80, 19090), (81, 19093), (83, 19099),

Gene: Reccee\_25 Start: 19238, Stop: 19570, Start Num: 59

Candidate Starts for Reccee\_25:

(8, 18860), (12, 18902), (17, 18968), (23, 19013), (30, 19106), (45, 19196), (Start: 52 @19223 has 1 MA's), (Start: 59 @19238 has 357 MA's), (75, 19307), (81, 19355), (83, 19361),

Gene: RedMaple\_23 Start: 18352, Stop: 18681, Start Num: 59

Candidate Starts for RedMaple\_23:

(Start: 56 @18346 has 92 MA's), (Start: 59 @18352 has 357 MA's), (Start: 64 @18361 has 2 MA's), (Start: 65 @18364 has 1 MA's), (75, 18421), (82, 18472), (107, 18589), (116, 18646),

Gene: RedRaider89\_25 Start: 18572, Stop: 18901, Start Num: 59

Candidate Starts for RedRaider89\_25:

(Start: 56 @18566 has 92 MA's), (Start: 59 @18572 has 357 MA's), (Start: 64 @18581 has 2 MA's), (Start: 65 @18584 has 1 MA's), (75, 18641), (82, 18692), (107, 18809), (116, 18866),

Gene: Renkei\_21 Start: 17951, Stop: 18307, Start Num: 59

Candidate Starts for Renkei\_21:

(37, 17885), (41, 17900), (Start: 59 @17951 has 357 MA's), (Start: 64 @17960 has 2 MA's), (75, 18023), (77, 18041), (80, 18068), (81, 18071), (83, 18077),

Gene: Reprobate\_24 Start: 19303, Stop: 19641, Start Num: 55

Candidate Starts for Reprobate\_24:

(Start: 55 @19303 has 2 MA's), (Start: 59 @19309 has 357 MA's), (75, 19378), (77, 19396), (79, 19408), (83, 19432),

Gene: Rhinoforte\_26 Start: 20598, Stop: 20951, Start Num: 59

Candidate Starts for Rhinoforte\_26:

(15, 20325), (20, 20373), (28, 20469), (Start: 59 @20598 has 357 MA's), (83, 20718), (92, 20784), (96, 20805),

Gene: Ribeye\_29 Start: 22643, Stop: 23026, Start Num: 53

Candidate Starts for Ribeye\_29:

(Start: 53 @22643 has 60 MA's), (70, 22691), (73, 22709), (80, 22760), (109, 22922), (121, 22997),

Gene: Rich\_23 Start: 18810, Stop: 19142, Start Num: 59

Candidate Starts for Rich\_23:

(Start: 56 @18804 has 92 MA's), (Start: 59 @18810 has 357 MA's), (81, 18927), (83, 18933),

Gene: Ricotta\_23 Start: 18064, Stop: 18393, Start Num: 59

Candidate Starts for Ricotta\_23:

(Start: 56 @18058 has 92 MA's), (Start: 59 @18064 has 357 MA's), (Start: 64 @18073 has 2 MA's), (Start: 65 @18076 has 1 MA's), (75, 18133), (82, 18184), (107, 18301), (116, 18358),

Gene: Riggan\_24 Start: 18318, Stop: 18653, Start Num: 56

Candidate Starts for Riggan\_24:

(Start: 56 @18318 has 92 MA's), (Start: 59 @18324 has 357 MA's), (Start: 64 @18333 has 2 MA's), (Start: 65 @18336 has 1 MA's), (75, 18393), (82, 18444), (107, 18561), (116, 18618),

Gene: Rimu\_24 Start: 18053, Stop: 18403, Start Num: 59

Candidate Starts for Rimu\_24:

(Start: 56 @18047 has 92 MA's), (Start: 59 @18053 has 357 MA's), (Start: 64 @18062 has 2 MA's), (Start: 65 @18065 has 1 MA's), (75, 18122), (82, 18173), (107, 18308), (116, 18365),

Gene: Rinkes\_27 Start: 21343, Stop: 21666, Start Num: 59

Candidate Starts for Rinkes\_27:

(35, 21274), (38, 21283), (48, 21316), (Start: 59 @21343 has 357 MA's), (75, 21412), (77, 21430), (83, 21466), (91, 21502), (95, 21514), (107, 21583),

Gene: Rita130\_24 Start: 19058, Stop: 19390, Start Num: 59

Candidate Starts for Rita130\_24:

(8, 18680), (12, 18722), (17, 18788), (23, 18833), (30, 18926), (45, 19016), (Start: 52 @19043 has 1 MA's), (Start: 59 @19058 has 357 MA's), (75, 19127), (81, 19175), (83, 19181),

Gene: Rita1961\_25 Start: 19004, Stop: 19375, Start Num: 59

Candidate Starts for Rita1961\_25:

(34, 18929), (37, 18938), (Start: 59 @19004 has 357 MA's), (Start: 64 @19019 has 2 MA's), (75, 19076), (76, 19082), (80, 19121), (83, 19130),

Gene: RiverRaider\_29 Start: 21027, Stop: 21458, Start Num: 53

Candidate Starts for RiverRaider\_29:

(Start: 53 @21027 has 60 MA's), (70, 21081), (75, 21105), (80, 21150), (109, 21318), (121, 21393),

Gene: Riverton\_23 Start: 18342, Stop: 18677, Start Num: 56

Candidate Starts for Riverton\_23:

(Start: 56 @18342 has 92 MA's), (Start: 59 @18348 has 357 MA's), (Start: 64 @18357 has 2 MA's), (Start: 65 @18360 has 1 MA's), (75, 18417), (82, 18468), (107, 18585), (116, 18642),

Gene: RoadKill\_24 Start: 18830, Stop: 19123, Start Num: 59

Candidate Starts for RoadKill\_24:

(46, 18806), (Start: 59 @18830 has 357 MA's), (72, 18887), (73, 18890), (82, 18947),

Gene: Robyn\_23 Start: 17915, Stop: 18244, Start Num: 59

Candidate Starts for Robyn\_23:

(Start: 56 @17909 has 92 MA's), (Start: 59 @17915 has 357 MA's), (Start: 64 @17924 has 2 MA's),  
(Start: 65 @17927 has 1 MA's), (75, 17984), (82, 18035), (107, 18152), (116, 18209),

Gene: Rofo\_29 Start: 22826, Stop: 23233, Start Num: 53

Candidate Starts for Rofo\_29:

(Start: 53 @22826 has 60 MA's), (Start: 64 @22847 has 2 MA's), (80, 22949), (99, 23024), (109,  
23111), (119, 23162),

Gene: Roliet\_24 Start: 18334, Stop: 18669, Start Num: 56

Candidate Starts for Roliet\_24:

(Start: 56 @18334 has 92 MA's), (Start: 59 @18340 has 357 MA's), (Start: 64 @18349 has 2 MA's),  
(Start: 65 @18352 has 1 MA's), (75, 18409), (82, 18460), (107, 18577), (116, 18634),

Gene: RomaT\_25 Start: 19791, Stop: 20165, Start Num: 59

Candidate Starts for RomaT\_25:

(34, 19716), (37, 19725), (Start: 59 @19791 has 357 MA's), (Start: 64 @19806 has 2 MA's), (75,  
19863), (76, 19869), (80, 19908), (83, 19917),

Gene: Roscoe\_25 Start: 18582, Stop: 18911, Start Num: 59

Candidate Starts for Roscoe\_25:

(Start: 56 @18576 has 92 MA's), (Start: 59 @18582 has 357 MA's), (Start: 64 @18591 has 2 MA's),  
(Start: 65 @18594 has 1 MA's), (75, 18651), (82, 18702), (107, 18819), (116, 18876),

Gene: Rosebush\_26 Start: 20598, Stop: 20951, Start Num: 59

Candidate Starts for Rosebush\_26:

(15, 20325), (20, 20373), (28, 20469), (Start: 59 @20598 has 357 MA's), (83, 20718), (92, 20784), (96,  
20805),

Gene: Roy17\_24 Start: 18038, Stop: 18373, Start Num: 56

Candidate Starts for Roy17\_24:

(Start: 56 @18038 has 92 MA's), (Start: 59 @18044 has 357 MA's), (Start: 64 @18053 has 2 MA's),  
(Start: 65 @18056 has 1 MA's), (75, 18113), (82, 18164), (107, 18281), (116, 18338),

Gene: SDcharge11\_24 Start: 18316, Stop: 18651, Start Num: 56

Candidate Starts for SDcharge11\_24:

(Start: 56 @18316 has 92 MA's), (Start: 59 @18322 has 357 MA's), (Start: 64 @18331 has 2 MA's),  
(Start: 65 @18334 has 1 MA's), (75, 18391), (82, 18442), (107, 18559), (116, 18616),

Gene: Sabella\_26 Start: 20484, Stop: 20837, Start Num: 59

Candidate Starts for Sabella\_26:

(15, 20211), (20, 20259), (28, 20355), (Start: 59 @20484 has 357 MA's), (83, 20604), (92, 20670), (96,  
20691),

Gene: Saguaro\_25 Start: 20382, Stop: 20711, Start Num: 59

Candidate Starts for Saguaro\_25:

(Start: 59 @20382 has 357 MA's), (77, 20469), (81, 20499), (83, 20505), (95, 20553), (107, 20622),

Gene: SallyH\_24 Start: 18348, Stop: 18683, Start Num: 56

Candidate Starts for SallyH\_24:

(Start: 56 @18348 has 92 MA's), (Start: 59 @18354 has 357 MA's), (Start: 64 @18363 has 2 MA's),  
(Start: 65 @18366 has 1 MA's), (75, 18423), (82, 18474), (107, 18591), (116, 18648),

Gene: Samaymay\_24 Start: 18341, Stop: 18670, Start Num: 59

Candidate Starts for Samaymay\_24:

(Start: 56 @18335 has 92 MA's), (Start: 59 @18341 has 357 MA's), (Start: 64 @18350 has 2 MA's),  
(Start: 65 @18353 has 1 MA's), (75, 18410), (82, 18461), (107, 18578), (116, 18635),

Gene: Sampson\_29 Start: 22515, Stop: 22925, Start Num: 57

Candidate Starts for Sampson\_29:

(Start: 57 @22515 has 9 MA's), (Start: 64 @22527 has 2 MA's), (72, 22575), (73, 22578), (77, 22602),  
(81, 22632), (94, 22689), (102, 22749),

Gene: Sanjuju\_27 Start: 23007, Stop: 23414, Start Num: 53

Candidate Starts for Sanjuju\_27:

(Start: 53 @23007 has 60 MA's), (Start: 64 @23028 has 2 MA's), (80, 23130), (99, 23205), (109,  
23292), (119, 23343),

Gene: Saronaya\_28 Start: 21477, Stop: 21872, Start Num: 53

Candidate Starts for Saronaya\_28:

(Start: 53 @21477 has 60 MA's), (70, 21525), (73, 21543), (80, 21594), (100, 21687), (109, 21756),  
(121, 21831),

Gene: SassyCat97\_23 Start: 18050, Stop: 18379, Start Num: 59

Candidate Starts for SassyCat97\_23:

(Start: 56 @18044 has 92 MA's), (Start: 59 @18050 has 357 MA's), (Start: 64 @18059 has 2 MA's),  
(Start: 65 @18062 has 1 MA's), (75, 18119), (82, 18170), (107, 18287), (116, 18344),

Gene: Schadenfreude\_23 Start: 17898, Stop: 18227, Start Num: 59

Candidate Starts for Schadenfreude\_23:

(Start: 56 @17892 has 92 MA's), (Start: 59 @17898 has 357 MA's), (Start: 64 @17907 has 2 MA's),  
(Start: 65 @17910 has 1 MA's), (75, 17967), (82, 18018), (107, 18135), (116, 18192),

Gene: SchottB\_27 Start: 22489, Stop: 22884, Start Num: 53

Candidate Starts for SchottB\_27:

(Start: 53 @22489 has 60 MA's), (70, 22537), (73, 22555), (80, 22606), (100, 22699), (109, 22768),  
(121, 22843),

Gene: Schueller\_23 Start: 18042, Stop: 18371, Start Num: 59

Candidate Starts for Schueller\_23:

(Start: 59 @18042 has 357 MA's), (Start: 64 @18051 has 2 MA's), (Start: 65 @18054 has 1 MA's), (75,  
18111), (82, 18162), (107, 18279), (116, 18336),

Gene: Scioto\_29 Start: 22570, Stop: 22980, Start Num: 57

Candidate Starts for Scioto\_29:

(Start: 57 @22570 has 9 MA's), (Start: 64 @22582 has 2 MA's), (72, 22630), (73, 22633), (77, 22657),  
(81, 22687), (94, 22744), (102, 22804),

Gene: Scoot17C\_24 Start: 18337, Stop: 18672, Start Num: 56

Candidate Starts for Scoot17C\_24:

(Start: 56 @18337 has 92 MA's), (Start: 59 @18343 has 357 MA's), (Start: 64 @18352 has 2 MA's),  
(Start: 65 @18355 has 1 MA's), (75, 18412), (82, 18463), (107, 18580), (116, 18637),

Gene: Scrick\_24 Start: 18068, Stop: 18397, Start Num: 59

Candidate Starts for Scrick\_24:

(Start: 56 @18062 has 92 MA's), (Start: 59 @18068 has 357 MA's), (Start: 64 @18077 has 2 MA's), (Start: 65 @18080 has 1 MA's), (75, 18137), (82, 18188), (107, 18305), (116, 18362),

Gene: Sedona\_29 Start: 23932, Stop: 24339, Start Num: 53

Candidate Starts for Sedona\_29:

(Start: 53 @23932 has 60 MA's), (Start: 64 @23953 has 2 MA's), (80, 24055), (99, 24130), (109, 24217), (121, 24292),

Gene: Selr12\_24 Start: 18065, Stop: 18394, Start Num: 59

Candidate Starts for Selr12\_24:

(Start: 56 @18059 has 92 MA's), (Start: 59 @18065 has 357 MA's), (Start: 64 @18074 has 2 MA's), (Start: 65 @18077 has 1 MA's), (75, 18134), (82, 18185), (107, 18302), (116, 18359),

Gene: Serendipitous\_23 Start: 18867, Stop: 19199, Start Num: 59

Candidate Starts for Serendipitous\_23:

(37, 18801), (Start: 55 @18861 has 2 MA's), (Start: 59 @18867 has 357 MA's), (75, 18936), (81, 18984), (83, 18990),

Gene: Serendipity\_24 Start: 18357, Stop: 18692, Start Num: 56

Candidate Starts for Serendipity\_24:

(Start: 56 @18357 has 92 MA's), (Start: 59 @18363 has 357 MA's), (Start: 64 @18372 has 2 MA's), (Start: 65 @18375 has 1 MA's), (75, 18432), (82, 18483), (107, 18600), (116, 18657),

Gene: Serpentine\_0024 Start: 18337, Stop: 18672, Start Num: 56

Candidate Starts for Serpentine\_0024:

(Start: 56 @18337 has 92 MA's), (Start: 59 @18343 has 357 MA's), (Start: 64 @18352 has 2 MA's), (Start: 65 @18355 has 1 MA's), (75, 18412), (82, 18463), (107, 18580), (116, 18637),

Gene: ShadowBud\_24 Start: 18356, Stop: 18685, Start Num: 59

Candidate Starts for ShadowBud\_24:

(Start: 56 @18350 has 92 MA's), (Start: 59 @18356 has 357 MA's), (Start: 64 @18365 has 2 MA's), (Start: 65 @18368 has 1 MA's), (75, 18425), (82, 18476), (107, 18593), (116, 18650),

Gene: Shatter\_21 Start: 16902, Stop: 17228, Start Num: 58

Candidate Starts for Shatter\_21:

(9, 16536), (11, 16554), (16, 16620), (20, 16665), (25, 16692), (28, 16758), (Start: 58 @16902 has 5 MA's), (77, 16995), (80, 17022), (111, 17196),

Gene: Sheila\_24 Start: 18335, Stop: 18664, Start Num: 59

Candidate Starts for Sheila\_24:

(Start: 56 @18329 has 92 MA's), (Start: 59 @18335 has 357 MA's), (Start: 64 @18344 has 2 MA's), (Start: 65 @18347 has 1 MA's), (75, 18404), (82, 18455), (107, 18572), (116, 18629),

Gene: Shenandoah\_25 Start: 18987, Stop: 19358, Start Num: 59

Candidate Starts for Shenandoah\_25:

(34, 18912), (37, 18921), (Start: 59 @18987 has 357 MA's), (Start: 64 @19002 has 2 MA's), (75, 19059), (76, 19065), (80, 19104), (83, 19113),

Gene: Shenyu\_24 Start: 19007, Stop: 19342, Start Num: 59

Candidate Starts for Shenyu\_24:

(37, 18941), (Start: 55 @19001 has 2 MA's), (Start: 59 @19007 has 357 MA's), (75, 19076), (81, 19124), (83, 19130),

Gene: ShiVal\_24 Start: 18329, Stop: 18664, Start Num: 56

Candidate Starts for ShiVal\_24:

(Start: 56 @18329 has 92 MA's), (Start: 59 @18335 has 357 MA's), (Start: 64 @18344 has 2 MA's), (Start: 65 @18347 has 1 MA's), (75, 18404), (82, 18455), (107, 18572), (116, 18629),

Gene: Shivanishola\_30 Start: 22906, Stop: 23313, Start Num: 53

Candidate Starts for Shivanishola\_30:

(Start: 53 @22906 has 60 MA's), (Start: 64 @22927 has 2 MA's), (80, 23029), (99, 23104), (109, 23191), (119, 23242),

Gene: Sigman\_24 Start: 18334, Stop: 18663, Start Num: 59

Candidate Starts for Sigman\_24:

(Start: 56 @18328 has 92 MA's), (Start: 59 @18334 has 357 MA's), (Start: 64 @18343 has 2 MA's), (Start: 65 @18346 has 1 MA's), (75, 18403), (82, 18454), (107, 18571), (116, 18628),

Gene: SilverBell\_24 Start: 18352, Stop: 18687, Start Num: 56

Candidate Starts for SilverBell\_24:

(Start: 56 @18352 has 92 MA's), (Start: 59 @18358 has 357 MA's), (Start: 64 @18367 has 2 MA's), (Start: 65 @18370 has 1 MA's), (75, 18427), (82, 18478), (107, 18595), (116, 18652),

Gene: Simielle\_23 Start: 18033, Stop: 18362, Start Num: 59

Candidate Starts for Simielle\_23:

(Start: 56 @18027 has 92 MA's), (Start: 59 @18033 has 357 MA's), (Start: 64 @18042 has 2 MA's), (Start: 65 @18045 has 1 MA's), (75, 18102), (82, 18153), (107, 18270), (116, 18327),

Gene: SirBeauregard\_23 Start: 18004, Stop: 18357, Start Num: 56

Candidate Starts for SirBeauregard\_23:

(Start: 56 @18004 has 92 MA's), (Start: 59 @18010 has 357 MA's), (Start: 64 @18019 has 2 MA's), (Start: 65 @18022 has 1 MA's), (75, 18079), (82, 18130), (116, 18322),

Gene: SirJeffery\_24 Start: 19050, Stop: 19385, Start Num: 59

Candidate Starts for SirJeffery\_24:

(8, 18672), (12, 18714), (17, 18780), (23, 18825), (30, 18918), (45, 19008), (Start: 52 @19035 has 1 MA's), (Start: 59 @19050 has 357 MA's), (75, 19119), (81, 19167), (83, 19173),

Gene: Sisko\_21 Start: 17182, Stop: 17511, Start Num: 59

Candidate Starts for Sisko\_21:

(47, 17149), (Start: 59 @17182 has 357 MA's), (74, 17254), (76, 17263), (111, 17479),

Gene: Sitar\_29 Start: 23999, Stop: 24406, Start Num: 53

Candidate Starts for Sitar\_29:

(Start: 53 @23999 has 60 MA's), (Start: 64 @24020 has 2 MA's), (80, 24122), (99, 24197), (109, 24284), (119, 24335),

Gene: Skippy\_24 Start: 18328, Stop: 18657, Start Num: 59

Candidate Starts for Skippy\_24:

(Start: 56 @18322 has 92 MA's), (Start: 59 @18328 has 357 MA's), (Start: 64 @18337 has 2 MA's), (Start: 65 @18340 has 1 MA's), (75, 18397), (82, 18448), (107, 18565), (116, 18622),

Gene: Slatt\_24 Start: 18357, Stop: 18686, Start Num: 59

Candidate Starts for Slatt\_24:

(Start: 56 @18351 has 92 MA's), (Start: 59 @18357 has 357 MA's), (Start: 64 @18366 has 2 MA's), (Start: 65 @18369 has 1 MA's), (75, 18426), (82, 18477), (107, 18594), (116, 18651),

Gene: SlippinJimmy\_25 Start: 19773, Stop: 20144, Start Num: 59

Candidate Starts for SlippinJimmy\_25:

(34, 19698), (37, 19707), (Start: 59 @19773 has 357 MA's), (Start: 64 @19788 has 2 MA's), (75, 19845), (76, 19851), (80, 19890), (83, 19899),

Gene: Soile\_24 Start: 18056, Stop: 18385, Start Num: 59

Candidate Starts for Soile\_24:

(Start: 59 @18056 has 357 MA's), (Start: 64 @18065 has 2 MA's), (Start: 65 @18068 has 1 MA's), (75, 18125), (82, 18176), (107, 18293), (116, 18350),

Gene: Solosis\_23 Start: 18060, Stop: 18389, Start Num: 59

Candidate Starts for Solosis\_23:

(Start: 56 @18054 has 92 MA's), (Start: 59 @18060 has 357 MA's), (Start: 64 @18069 has 2 MA's), (Start: 65 @18072 has 1 MA's), (75, 18129), (82, 18180), (107, 18297), (116, 18354),

Gene: Soos\_48 Start: 28389, Stop: 28742, Start Num: 59

Candidate Starts for Soos\_48:

(Start: 59 @28389 has 357 MA's), (73, 28449),

Gene: Sophia\_23 Start: 18047, Stop: 18382, Start Num: 56

Candidate Starts for Sophia\_23:

(Start: 56 @18047 has 92 MA's), (Start: 59 @18053 has 357 MA's), (Start: 64 @18062 has 2 MA's), (Start: 65 @18065 has 1 MA's), (75, 18122), (82, 18173), (107, 18290), (116, 18347),

Gene: Soto\_24 Start: 18337, Stop: 18666, Start Num: 59

Candidate Starts for Soto\_24:

(Start: 56 @18331 has 92 MA's), (Start: 59 @18337 has 357 MA's), (Start: 64 @18346 has 2 MA's), (Start: 65 @18349 has 1 MA's), (75, 18406), (82, 18457), (107, 18574), (116, 18631),

Gene: Sour\_25 Start: 20893, Stop: 21228, Start Num: 59

Candidate Starts for Sour\_25:

(Start: 59 @20893 has 357 MA's), (77, 20986), (80, 21013), (82, 21019),

Gene: Spartan300\_24 Start: 18338, Stop: 18667, Start Num: 59

Candidate Starts for Spartan300\_24:

(Start: 56 @18332 has 92 MA's), (Start: 59 @18338 has 357 MA's), (Start: 64 @18347 has 2 MA's), (Start: 65 @18350 has 1 MA's), (75, 18407), (82, 18458), (107, 18575), (116, 18632),

Gene: Squid\_24 Start: 18044, Stop: 18379, Start Num: 56

Candidate Starts for Squid\_24:

(Start: 56 @18044 has 92 MA's), (Start: 59 @18050 has 357 MA's), (Start: 64 @18059 has 2 MA's), (Start: 65 @18062 has 1 MA's), (75, 18119), (82, 18170), (107, 18287), (116, 18344),

Gene: Squiggle\_24 Start: 18047, Stop: 18376, Start Num: 59

Candidate Starts for Squiggle\_24:

(Start: 56 @18041 has 92 MA's), (Start: 59 @18047 has 357 MA's), (Start: 64 @18056 has 2 MA's), (Start: 65 @18059 has 1 MA's), (75, 18116), (82, 18167), (107, 18284), (116, 18341),

Gene: Stillion\_52 Start: 28986, Stop: 29339, Start Num: 59

Candidate Starts for Stillion\_52:  
(Start: 59 @28986 has 357 MA's), (73, 29046),

Gene: Sting\_51 Start: 28828, Stop: 29181, Start Num: 59  
Candidate Starts for Sting\_51:  
(Start: 59 @28828 has 357 MA's), (73, 28888),

Gene: Stinger\_20 Start: 17517, Stop: 17876, Start Num: 59  
Candidate Starts for Stinger\_20:  
(Start: 59 @17517 has 357 MA's), (Start: 64 @17526 has 2 MA's), (75, 17589), (80, 17634), (82, 17640), (83, 17643), (97, 17721),

Gene: StinkyVeggy\_26 Start: 19179, Stop: 19514, Start Num: 59  
Candidate Starts for StinkyVeggy\_26:  
(37, 19113), (Start: 55 @19173 has 2 MA's), (Start: 59 @19179 has 357 MA's), (75, 19248), (81, 19296), (83, 19302),

Gene: StorminNorm\_28 Start: 21356, Stop: 21751, Start Num: 53  
Candidate Starts for StorminNorm\_28:  
(Start: 53 @21356 has 60 MA's), (70, 21404), (73, 21422), (80, 21473), (100, 21566), (109, 21635), (121, 21710),

Gene: Struggle\_23 Start: 17895, Stop: 18224, Start Num: 59  
Candidate Starts for Struggle\_23:  
(Start: 59 @17895 has 357 MA's), (Start: 64 @17904 has 2 MA's), (Start: 65 @17907 has 1 MA's), (75, 17964), (82, 18015), (107, 18132), (116, 18189),

Gene: Stultus\_27 Start: 21914, Stop: 22321, Start Num: 53  
Candidate Starts for Stultus\_27:  
(Start: 53 @21914 has 60 MA's), (Start: 64 @21935 has 2 MA's), (80, 22037), (99, 22112), (109, 22199), (119, 22250),

Gene: Suffolk\_24 Start: 18334, Stop: 18669, Start Num: 56  
Candidate Starts for Suffolk\_24:  
(Start: 56 @18334 has 92 MA's), (Start: 59 @18340 has 357 MA's), (Start: 64 @18349 has 2 MA's), (Start: 65 @18352 has 1 MA's), (75, 18409), (82, 18460), (107, 18577), (116, 18634),

Gene: Suigeneris\_24 Start: 19047, Stop: 19394, Start Num: 52  
Candidate Starts for Suigeneris\_24:  
(8, 18684), (12, 18726), (17, 18792), (23, 18837), (30, 18930), (45, 19020), (Start: 52 @19047 has 1 MA's), (Start: 59 @19062 has 357 MA's), (75, 19131), (81, 19179), (83, 19185),

Gene: Surely\_24 Start: 18346, Stop: 18681, Start Num: 56  
Candidate Starts for Surely\_24:  
(Start: 56 @18346 has 92 MA's), (Start: 59 @18352 has 357 MA's), (Start: 64 @18361 has 2 MA's), (Start: 65 @18364 has 1 MA's), (75, 18421), (82, 18472), (107, 18589), (116, 18646),

Gene: SwainyDoc\_25 Start: 19006, Stop: 19377, Start Num: 59  
Candidate Starts for SwainyDoc\_25:  
(34, 18931), (37, 18940), (Start: 59 @19006 has 357 MA's), (Start: 64 @19021 has 2 MA's), (75, 19078), (76, 19084), (80, 19123), (83, 19132),

Gene: Swiphy\_24 Start: 18342, Stop: 18671, Start Num: 59

Candidate Starts for Swiphy\_24:

(Start: 59 @18342 has 357 MA's), (Start: 64 @18351 has 2 MA's), (Start: 65 @18354 has 1 MA's), (75, 18411), (82, 18462), (107, 18579), (116, 18636),

Gene: Swish\_24 Start: 18335, Stop: 18664, Start Num: 59

Candidate Starts for Swish\_24:

(Start: 56 @18329 has 92 MA's), (Start: 59 @18335 has 357 MA's), (Start: 64 @18344 has 2 MA's), (Start: 65 @18347 has 1 MA's), (75, 18404), (82, 18455), (107, 18572), (116, 18629),

Gene: SynergyX\_25 Start: 19009, Stop: 19380, Start Num: 59

Candidate Starts for SynergyX\_25:

(34, 18934), (37, 18943), (Start: 59 @19009 has 357 MA's), (Start: 64 @19024 has 2 MA's), (75, 19081), (76, 19087), (80, 19126), (83, 19135),

Gene: TA17A\_27 Start: 20478, Stop: 20831, Start Num: 59

Candidate Starts for TA17A\_27:

(15, 20205), (20, 20253), (28, 20349), (Start: 59 @20478 has 357 MA's), (83, 20598), (92, 20664), (96, 20685),

Gene: TallGrassMM\_24 Start: 18061, Stop: 18396, Start Num: 56

Candidate Starts for TallGrassMM\_24:

(Start: 56 @18061 has 92 MA's), (Start: 59 @18067 has 357 MA's), (Start: 64 @18076 has 2 MA's), (Start: 65 @18079 has 1 MA's), (75, 18136), (82, 18187), (107, 18304), (116, 18361),

Gene: Tangent\_29 Start: 22348, Stop: 22755, Start Num: 53

Candidate Starts for Tangent\_29:

(Start: 53 @22348 has 60 MA's), (Start: 64 @22369 has 2 MA's), (80, 22471), (99, 22546), (109, 22633), (119, 22684),

Gene: Tangerine\_28 Start: 21362, Stop: 21757, Start Num: 53

Candidate Starts for Tangerine\_28:

(Start: 53 @21362 has 60 MA's), (70, 21410), (73, 21428), (80, 21479), (100, 21572), (109, 21641), (121, 21716),

Gene: Taptic\_18 Start: 17761, Stop: 18147, Start Num: 59

Candidate Starts for Taptic\_18:

(39, 17707), (Start: 59 @17761 has 357 MA's), (62, 17767), (Start: 64 @17773 has 2 MA's), (101, 18049),

Gene: Tardus\_30 Start: 21851, Stop: 22261, Start Num: 57

Candidate Starts for Tardus\_30:

(Start: 57 @21851 has 9 MA's), (Start: 64 @21863 has 2 MA's), (72, 21911), (73, 21914), (81, 21968), (94, 22025), (102, 22085),

Gene: Telesworld\_23 Start: 18040, Stop: 18375, Start Num: 56

Candidate Starts for Telesworld\_23:

(Start: 56 @18040 has 92 MA's), (Start: 59 @18046 has 357 MA's), (Start: 64 @18055 has 2 MA's), (Start: 65 @18058 has 1 MA's), (75, 18115), (82, 18166), (107, 18283), (116, 18340),

Gene: Thing3\_28 Start: 22841, Stop: 23248, Start Num: 53

Candidate Starts for Thing3\_28:

(Start: 53 @22841 has 60 MA's), (Start: 64 @22862 has 2 MA's), (80, 22964), (99, 23039), (109, 23126), (119, 23177),

Gene: Thonko\_23 Start: 16811, Stop: 17152, Start Num: 54

Candidate Starts for Thonko\_23:

(Start: 54 @16811 has 1 MA's), (Start: 59 @16820 has 357 MA's), (67, 16847), (75, 16889), (77, 16907), (83, 16943), (95, 16991), (107, 17060),

Gene: Thora\_24 Start: 18345, Stop: 18680, Start Num: 56

Candidate Starts for Thora\_24:

(Start: 56 @18345 has 92 MA's), (Start: 59 @18351 has 357 MA's), (Start: 64 @18360 has 2 MA's), (Start: 65 @18363 has 1 MA's), (75, 18420), (82, 18471), (107, 18588), (116, 18645),

Gene: ThreeOh3D2\_24 Start: 18350, Stop: 18679, Start Num: 59

Candidate Starts for ThreeOh3D2\_24:

(Start: 56 @18344 has 92 MA's), (Start: 59 @18350 has 357 MA's), (Start: 64 @18359 has 2 MA's), (Start: 65 @18362 has 1 MA's), (75, 18419), (82, 18470), (107, 18587), (116, 18644),

Gene: Thunderbird\_23 Start: 18050, Stop: 18379, Start Num: 59

Candidate Starts for Thunderbird\_23:

(Start: 56 @18044 has 92 MA's), (Start: 59 @18050 has 357 MA's), (Start: 64 @18059 has 2 MA's), (Start: 65 @18062 has 1 MA's), (75, 18119), (82, 18170), (107, 18287), (116, 18344),

Gene: Tiamoceli\_27 Start: 20181, Stop: 20474, Start Num: 59

Candidate Starts for Tiamoceli\_27:

(46, 20157), (Start: 59 @20181 has 357 MA's), (73, 20241), (82, 20298),

Gene: Timmi\_23 Start: 18055, Stop: 18390, Start Num: 56

Candidate Starts for Timmi\_23:

(Start: 56 @18055 has 92 MA's), (Start: 59 @18061 has 357 MA's), (Start: 64 @18070 has 2 MA's), (Start: 65 @18073 has 1 MA's), (75, 18130), (82, 18181), (107, 18298), (116, 18355),

Gene: Tinciduntolum\_27 Start: 20600, Stop: 20953, Start Num: 59

Candidate Starts for Tinciduntolum\_27:

(15, 20327), (20, 20375), (28, 20471), (Start: 59 @20600 has 357 MA's), (83, 20720), (92, 20786), (96, 20807),

Gene: TinyTerror\_25 Start: 19006, Stop: 19377, Start Num: 59

Candidate Starts for TinyTerror\_25:

(34, 18931), (37, 18940), (Start: 59 @19006 has 357 MA's), (Start: 64 @19021 has 2 MA's), (75, 19078), (76, 19084), (80, 19123), (83, 19132),

Gene: TomBombadil\_24 Start: 18340, Stop: 18675, Start Num: 56

Candidate Starts for TomBombadil\_24:

(Start: 56 @18340 has 92 MA's), (Start: 59 @18346 has 357 MA's), (Start: 64 @18355 has 2 MA's), (Start: 65 @18358 has 1 MA's), (75, 18415), (82, 18466), (107, 18583), (116, 18640),

Gene: Tomlarah\_24 Start: 18336, Stop: 18665, Start Num: 59

Candidate Starts for Tomlarah\_24:

(Start: 56 @18330 has 92 MA's), (Start: 59 @18336 has 357 MA's), (Start: 64 @18345 has 2 MA's), (Start: 65 @18348 has 1 MA's), (75, 18405), (82, 18456), (107, 18573), (116, 18630),

Gene: Toni\_23 Start: 18039, Stop: 18374, Start Num: 56

Candidate Starts for Toni\_23:

(Start: 56 @18039 has 92 MA's), (Start: 59 @18045 has 357 MA's), (Start: 64 @18054 has 2 MA's),  
(Start: 65 @18057 has 1 MA's), (75, 18114), (82, 18165), (107, 18282), (116, 18339),

Gene: Tonitrus\_39 Start: 27042, Stop: 27359, Start Num: 59

Candidate Starts for Tonitrus\_39:

(Start: 59 @27042 has 357 MA's), (66, 27066), (71, 27081), (75, 27105), (77, 27123), (80, 27150), (84,  
27162), (85, 27177), (112, 27327),

Gene: TooFast2Furius\_25 Start: 18576, Stop: 18911, Start Num: 56

Candidate Starts for TooFast2Furius\_25:

(Start: 56 @18576 has 92 MA's), (Start: 59 @18582 has 357 MA's), (Start: 64 @18591 has 2 MA's),  
(Start: 65 @18594 has 1 MA's), (75, 18651), (82, 18702), (107, 18819), (116, 18876),

Gene: Tooj\_24 Start: 18341, Stop: 18676, Start Num: 56

Candidate Starts for Tooj\_24:

(Start: 56 @18341 has 92 MA's), (Start: 59 @18347 has 357 MA's), (Start: 64 @18356 has 2 MA's),  
(Start: 65 @18359 has 1 MA's), (75, 18416), (82, 18467), (107, 18584), (116, 18641),

Gene: TraderJ\_23 Start: 18269, Stop: 18610, Start Num: 59

Candidate Starts for TraderJ\_23:

(Start: 59 @18269 has 357 MA's), (Start: 64 @18284 has 2 MA's), (75, 18347), (77, 18365), (82,  
18398), (114, 18593),

Gene: Tres\_26 Start: 20481, Stop: 20834, Start Num: 59

Candidate Starts for Tres\_26:

(15, 20208), (20, 20256), (28, 20352), (Start: 59 @20481 has 357 MA's), (83, 20601), (92, 20667), (96,  
20688),

Gene: Triad\_24 Start: 17216, Stop: 17545, Start Num: 59

Candidate Starts for Triad\_24:

(Start: 56 @17210 has 92 MA's), (Start: 59 @17216 has 357 MA's), (Start: 64 @17225 has 2 MA's),  
(Start: 65 @17228 has 1 MA's), (75, 17285), (82, 17336), (107, 17453), (116, 17510),

Gene: True\_23 Start: 18049, Stop: 18378, Start Num: 59

Candidate Starts for True\_23:

(Start: 56 @18043 has 92 MA's), (Start: 59 @18049 has 357 MA's), (Start: 64 @18058 has 2 MA's),  
(Start: 65 @18061 has 1 MA's), (75, 18118), (82, 18169), (107, 18286), (116, 18343),

Gene: Trypo\_24 Start: 18339, Stop: 18668, Start Num: 59

Candidate Starts for Trypo\_24:

(Start: 59 @18339 has 357 MA's), (Start: 64 @18348 has 2 MA's), (Start: 65 @18351 has 1 MA's), (75,  
18408), (82, 18459), (107, 18576), (116, 18633),

Gene: Twonlo\_24 Start: 18799, Stop: 19092, Start Num: 59

Candidate Starts for Twonlo\_24:

(46, 18775), (Start: 59 @18799 has 357 MA's), (73, 18859), (82, 18916),

Gene: Tycho\_28 Start: 21451, Stop: 21846, Start Num: 53

Candidate Starts for Tycho\_28:

(Start: 53 @21451 has 60 MA's), (70, 21499), (73, 21517), (80, 21568), (100, 21661), (109, 21730),  
(121, 21805),

Gene: Tydolla\_25 Start: 19746, Stop: 20117, Start Num: 59

Candidate Starts for Tydolla\_25:

(34, 19671), (37, 19680), (Start: 59 @19746 has 357 MA's), (Start: 64 @19761 has 2 MA's), (75, 19818), (76, 19824), (80, 19863), (83, 19872),

Gene: TyrionL\_23 Start: 17903, Stop: 18232, Start Num: 59

Candidate Starts for TyrionL\_23:

(Start: 59 @17903 has 357 MA's), (Start: 64 @17912 has 2 MA's), (Start: 65 @17915 has 1 MA's), (75, 17972), (82, 18023), (107, 18140), (116, 18197),

Gene: UAch1\_24 Start: 18358, Stop: 18687, Start Num: 59

Candidate Starts for UAch1\_24:

(Start: 56 @18352 has 92 MA's), (Start: 59 @18358 has 357 MA's), (Start: 64 @18367 has 2 MA's), (Start: 65 @18370 has 1 MA's), (75, 18427), (82, 18478), (107, 18595), (116, 18652),

Gene: UncleHowie\_24 Start: 18042, Stop: 18377, Start Num: 56

Candidate Starts for UncleHowie\_24:

(Start: 56 @18042 has 92 MA's), (Start: 59 @18048 has 357 MA's), (Start: 64 @18057 has 2 MA's), (Start: 65 @18060 has 1 MA's), (75, 18117), (82, 18168), (107, 18285), (116, 18342),

Gene: Usavi\_24 Start: 18349, Stop: 18678, Start Num: 59

Candidate Starts for Usavi\_24:

(Start: 56 @18343 has 92 MA's), (Start: 59 @18349 has 357 MA's), (Start: 64 @18358 has 2 MA's), (Start: 65 @18361 has 1 MA's), (75, 18418), (82, 18469), (107, 18586), (116, 18643),

Gene: Vaishali24\_23 Start: 18002, Stop: 18337, Start Num: 59

Candidate Starts for Vaishali24\_23:

(Start: 56 @17996 has 92 MA's), (Start: 59 @18002 has 357 MA's), (Start: 64 @18011 has 2 MA's), (Start: 65 @18014 has 1 MA's), (75, 18071), (82, 18122), (107, 18242), (116, 18299),

Gene: Valjean\_24 Start: 18335, Stop: 18670, Start Num: 56

Candidate Starts for Valjean\_24:

(Start: 56 @18335 has 92 MA's), (Start: 59 @18341 has 357 MA's), (Start: 64 @18350 has 2 MA's), (Start: 65 @18353 has 1 MA's), (75, 18410), (82, 18461), (107, 18578), (116, 18635),

Gene: Vaticameos\_24 Start: 18033, Stop: 18368, Start Num: 56

Candidate Starts for Vaticameos\_24:

(Start: 56 @18033 has 92 MA's), (Start: 59 @18039 has 357 MA's), (Start: 64 @18048 has 2 MA's), (Start: 65 @18051 has 1 MA's), (75, 18108), (82, 18159), (107, 18276), (116, 18333),

Gene: Veritas\_23 Start: 17900, Stop: 18238, Start Num: 65

Candidate Starts for Veritas\_23:

(Start: 56 @17882 has 92 MA's), (Start: 59 @17888 has 357 MA's), (Start: 64 @17897 has 2 MA's), (Start: 65 @17900 has 1 MA's), (75, 17957), (82, 18008), (107, 18143), (116, 18200),

Gene: Verity\_28 Start: 22700, Stop: 23113, Start Num: 57

Candidate Starts for Verity\_28:

(Start: 57 @22700 has 9 MA's), (Start: 64 @22712 has 2 MA's), (72, 22760), (73, 22763), (81, 22817), (94, 22877), (102, 22937), (110, 22979), (118, 23021),

Gene: ViaConlectus\_29 Start: 21194, Stop: 21604, Start Num: 57

Candidate Starts for ViaConlectus\_29:

(Start: 57 @21194 has 9 MA's), (Start: 64 @21206 has 2 MA's), (72, 21254), (73, 21257), (81, 21311), (94, 21368), (102, 21428),

Gene: Vic9\_00026 Start: 20923, Stop: 21282, Start Num: 59

Candidate Starts for Vic9\_00026:

(15, 20650), (20, 20698), (28, 20794), (Start: 59 @20923 has 357 MA's), (83, 21043), (92, 21115), (96, 21136),

Gene: Vincenzo\_23 Start: 19743, Stop: 20084, Start Num: 59

Candidate Starts for Vincenzo\_23:

(5, 19341), (10, 19392), (43, 19698), (Start: 59 @19743 has 357 MA's), (73, 19806), (75, 19812), (77, 19830), (80, 19857), (83, 19866), (98, 19938),

Gene: VioletZ\_22 Start: 19032, Stop: 19388, Start Num: 59

Candidate Starts for VioletZ\_22:

(37, 18966), (41, 18981), (46, 18996), (Start: 59 @19032 has 357 MA's), (Start: 64 @19041 has 2 MA's), (75, 19104), (77, 19122), (80, 19149), (81, 19152), (83, 19158),

Gene: Virapocalypse\_24 Start: 18332, Stop: 18661, Start Num: 59

Candidate Starts for Virapocalypse\_24:

(Start: 56 @18326 has 92 MA's), (Start: 59 @18332 has 357 MA's), (Start: 64 @18341 has 2 MA's), (Start: 65 @18344 has 1 MA's), (75, 18401), (82, 18452), (107, 18569), (116, 18626),

Gene: Virgeve\_23 Start: 18048, Stop: 18404, Start Num: 56

Candidate Starts for Virgeve\_23:

(Start: 56 @18048 has 92 MA's), (Start: 59 @18054 has 357 MA's), (Start: 64 @18063 has 2 MA's), (Start: 65 @18066 has 1 MA's), (75, 18123), (82, 18174), (107, 18309), (116, 18366),

Gene: Vista\_24 Start: 18340, Stop: 18675, Start Num: 56

Candidate Starts for Vista\_24:

(Start: 56 @18340 has 92 MA's), (Start: 59 @18346 has 357 MA's), (Start: 64 @18355 has 2 MA's), (Start: 65 @18358 has 1 MA's), (75, 18415), (82, 18466), (107, 18583), (116, 18640),

Gene: Vivaldi\_24 Start: 18376, Stop: 18705, Start Num: 59

Candidate Starts for Vivaldi\_24:

(Start: 56 @18370 has 92 MA's), (Start: 59 @18376 has 357 MA's), (Start: 64 @18385 has 2 MA's), (Start: 65 @18388 has 1 MA's), (75, 18445), (82, 18496), (107, 18613), (116, 18670),

Gene: Vivi2\_31 Start: 23521, Stop: 23928, Start Num: 53

Candidate Starts for Vivi2\_31:

(Start: 53 @23521 has 60 MA's), (Start: 64 @23542 has 2 MA's), (80, 23644), (99, 23719), (109, 23806), (119, 23857),

Gene: Vortex\_24 Start: 18050, Stop: 18385, Start Num: 56

Candidate Starts for Vortex\_24:

(Start: 56 @18050 has 92 MA's), (Start: 59 @18056 has 357 MA's), (Start: 64 @18065 has 2 MA's), (Start: 65 @18068 has 1 MA's), (75, 18125), (82, 18176), (107, 18293), (116, 18350),

Gene: Waleliano\_22 Start: 18977, Stop: 19327, Start Num: 59

Candidate Starts for Waleliano\_22:

(37, 18911), (41, 18926), (46, 18941), (Start: 59 @18977 has 357 MA's), (Start: 64 @18986 has 2 MA's), (75, 19049), (77, 19067), (80, 19094), (81, 19097), (83, 19103),

Gene: Wallhey\_23 Start: 17907, Stop: 18236, Start Num: 59

Candidate Starts for Wallhey\_23:

(Start: 59 @17907 has 357 MA's), (Start: 64 @17916 has 2 MA's), (Start: 65 @17919 has 1 MA's), (75, 17976), (82, 18027), (107, 18144), (116, 18201),

Gene: Waterdiva\_24 Start: 18335, Stop: 18670, Start Num: 56

Candidate Starts for Waterdiva\_24:

(Start: 56 @18335 has 92 MA's), (Start: 59 @18341 has 357 MA's), (Start: 64 @18350 has 2 MA's), (Start: 65 @18353 has 1 MA's), (75, 18410), (82, 18461), (107, 18578), (116, 18635),

Gene: Weher20\_24 Start: 18335, Stop: 18664, Start Num: 59

Candidate Starts for Weher20\_24:

(Start: 59 @18335 has 357 MA's), (Start: 64 @18344 has 2 MA's), (Start: 65 @18347 has 1 MA's), (75, 18404), (82, 18455), (107, 18572), (116, 18629),

Gene: West99\_26 Start: 20601, Stop: 20954, Start Num: 59

Candidate Starts for West99\_26:

(15, 20328), (20, 20376), (28, 20472), (Start: 59 @20601 has 357 MA's), (83, 20721), (92, 20787), (96, 20808),

Gene: Windsor\_23 Start: 18009, Stop: 18356, Start Num: 59

Candidate Starts for Windsor\_23:

(Start: 56 @18003 has 92 MA's), (Start: 59 @18009 has 357 MA's), (Start: 64 @18018 has 2 MA's), (Start: 65 @18021 has 1 MA's), (75, 18078), (82, 18129), (116, 18321),

Gene: Wooper\_23 Start: 18275, Stop: 18616, Start Num: 59

Candidate Starts for Wooper\_23:

(Start: 59 @18275 has 357 MA's), (Start: 64 @18290 has 2 MA's), (75, 18353), (77, 18371), (82, 18404), (114, 18599),

Gene: Xavier\_23 Start: 18059, Stop: 18388, Start Num: 59

Candidate Starts for Xavier\_23:

(Start: 56 @18053 has 92 MA's), (Start: 59 @18059 has 357 MA's), (Start: 64 @18068 has 2 MA's), (Start: 65 @18071 has 1 MA's), (75, 18128), (82, 18179), (107, 18296), (116, 18353),

Gene: Xincheng\_21 Start: 18432, Stop: 18788, Start Num: 59

Candidate Starts for Xincheng\_21:

(37, 18366), (41, 18381), (46, 18396), (Start: 59 @18432 has 357 MA's), (Start: 64 @18441 has 2 MA's), (75, 18504), (77, 18522), (80, 18549), (81, 18552), (83, 18558),

Gene: Yago84\_21 Start: 17190, Stop: 17519, Start Num: 59

Candidate Starts for Yago84\_21:

(Start: 59 @17190 has 357 MA's), (74, 17262), (111, 17487),

Gene: Yahalom\_25 Start: 19018, Stop: 19392, Start Num: 59

Candidate Starts for Yahalom\_25:

(34, 18943), (37, 18952), (Start: 59 @19018 has 357 MA's), (Start: 64 @19033 has 2 MA's), (75, 19090), (76, 19096), (80, 19135), (83, 19144),

Gene: Yeshua\_23 Start: 18252, Stop: 18593, Start Num: 59

Candidate Starts for Yeshua\_23:

(Start: 59 @18252 has 357 MA's), (Start: 64 @18267 has 2 MA's), (75, 18330), (77, 18348), (82, 18381), (114, 18576),

Gene: Yinz\_25 Start: 19047, Stop: 19418, Start Num: 59

Candidate Starts for Yinz\_25:

(34, 18972), (37, 18981), (Start: 59 @19047 has 357 MA's), (Start: 64 @19062 has 2 MA's), (75, 19119), (76, 19125), (80, 19164), (83, 19173),

Gene: YorkOnyx\_29 Start: 21719, Stop: 22102, Start Num: 53

Candidate Starts for YorkOnyx\_29:

(Start: 53 @21719 has 60 MA's), (70, 21767), (73, 21785), (80, 21836), (109, 21998), (121, 22073),

Gene: Yoshand\_24 Start: 18342, Stop: 18677, Start Num: 56

Candidate Starts for Yoshand\_24:

(Start: 56 @18342 has 92 MA's), (Start: 59 @18348 has 357 MA's), (Start: 64 @18357 has 2 MA's), (Start: 65 @18360 has 1 MA's), (75, 18417), (82, 18468), (107, 18585), (116, 18642),

Gene: YouGoGlencoco\_24 Start: 18331, Stop: 18666, Start Num: 56

Candidate Starts for YouGoGlencoco\_24:

(Start: 56 @18331 has 92 MA's), (Start: 59 @18337 has 357 MA's), (Start: 64 @18346 has 2 MA's), (Start: 65 @18349 has 1 MA's), (75, 18406), (82, 18457), (107, 18574), (116, 18631),

Gene: Zaider\_25 Start: 18573, Stop: 18902, Start Num: 59

Candidate Starts for Zaider\_25:

(Start: 56 @18567 has 92 MA's), (Start: 59 @18573 has 357 MA's), (Start: 64 @18582 has 2 MA's), (Start: 65 @18585 has 1 MA's), (75, 18642), (82, 18693), (107, 18810), (116, 18867),

Gene: Zelda\_24 Start: 18342, Stop: 18671, Start Num: 59

Candidate Starts for Zelda\_24:

(Start: 56 @18336 has 92 MA's), (Start: 59 @18342 has 357 MA's), (Start: 64 @18351 has 2 MA's), (Start: 65 @18354 has 1 MA's), (75, 18411), (82, 18462), (107, 18579), (116, 18636),

Gene: Zemanar\_23 Start: 18986, Stop: 19327, Start Num: 64

Candidate Starts for Zemanar\_23:

(37, 18911), (41, 18926), (46, 18941), (Start: 59 @18977 has 357 MA's), (Start: 64 @18986 has 2 MA's), (75, 19049), (77, 19067), (80, 19094), (81, 19097), (83, 19103),

Gene: Zenteno07\_28 Start: 18782, Stop: 19108, Start Num: 59

Candidate Starts for Zenteno07\_28:

(29, 18644), (Start: 59 @18782 has 357 MA's), (78, 18878), (82, 18902), (107, 19019),

Gene: Zipp\_28 Start: 22597, Stop: 23010, Start Num: 57

Candidate Starts for Zipp\_28:

(Start: 57 @22597 has 9 MA's), (Start: 64 @22609 has 2 MA's), (72, 22657), (73, 22660), (81, 22714), (94, 22774), (102, 22834), (110, 22876),

Gene: Zitch\_30 Start: 20474, Stop: 20884, Start Num: 57

Candidate Starts for Zitch\_30:

(50, 20459), (Start: 57 @20474 has 9 MA's), (Start: 64 @20486 has 2 MA's), (72, 20534), (73, 20537), (77, 20561), (81, 20591), (94, 20648), (102, 20708),

Gene: Zonia\_24 Start: 18357, Stop: 18686, Start Num: 59

Candidate Starts for Zonia\_24:

(Start: 59 @18357 has 357 MA's), (Start: 64 @18366 has 2 MA's), (Start: 65 @18369 has 1 MA's), (75, 18426), (82, 18477), (107, 18594), (116, 18651),