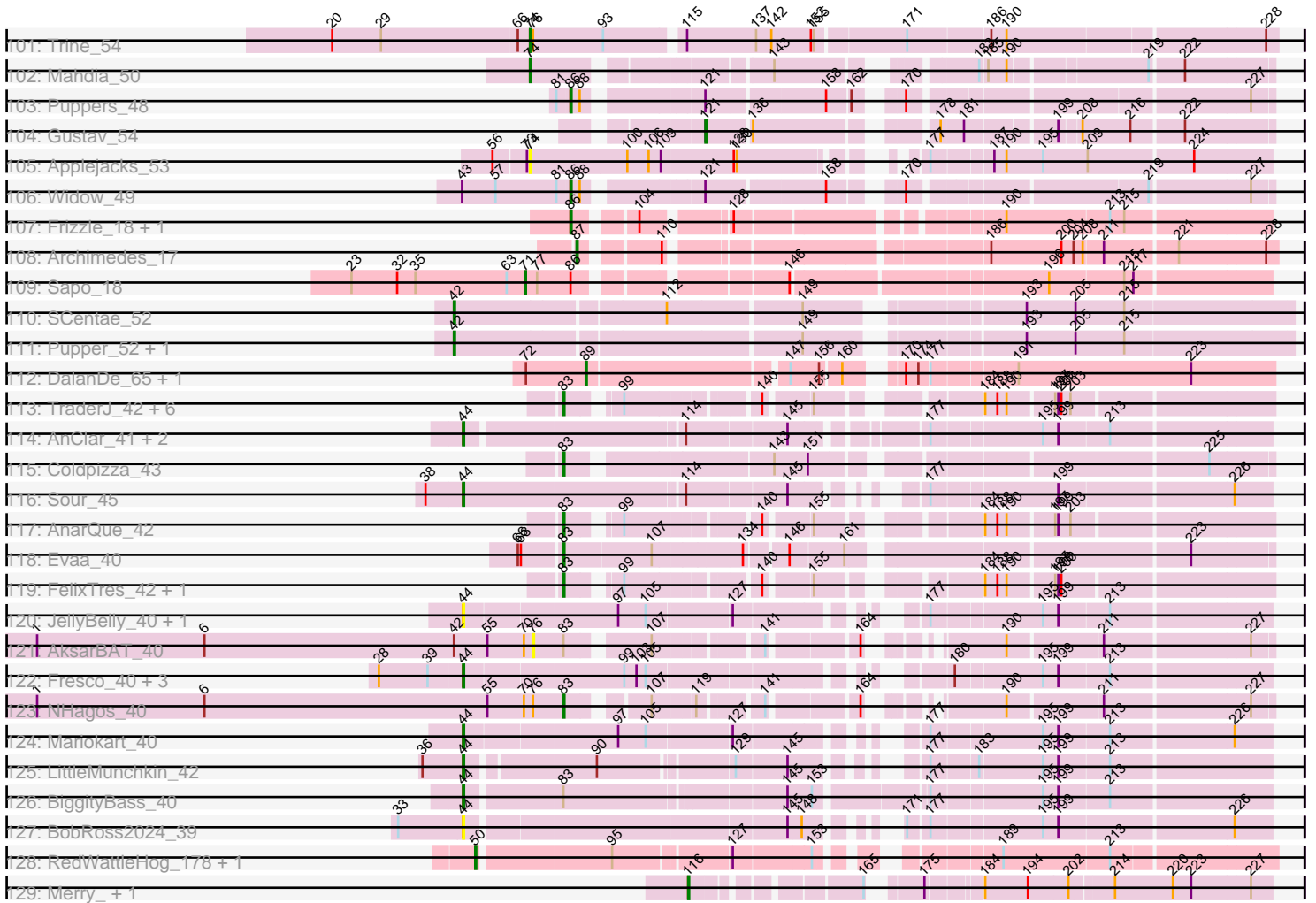






Pham 304574



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 304574 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304574 has 707 members, 100 are drafts.

Phages represented in each track:

- Track 1 : Morgushi\_47, Beaglebox\_46, Kwadwo\_46, Haleema\_46, Timmi\_46, Dice\_46, Brilliant\_47, Gwennie1\_47, HenryJackson\_46, Orfeu\_46, Khan1\_47, Lasso\_47, Ricotta\_46, Iridessa\_47, CamL\_47, Kahve\_46, Lumine\_46, TomBombadil\_47, Cannibal\_47, Dione\_46, Samaymay\_47, LuckyMarjie\_46, Freya\_46, Legolas\_47, Nathan\_47, MrPhizzler\_47, Simielle\_46, Maru\_46, Rimu\_47, NiaNia\_49, Gareth\_46, Grand2040\_46, Sophia\_46, Eugenia\_47, Serendipity\_47, QueenBeane\_47, Mesmerelda\_46, PinheadLarry\_47, Longacauda\_46, Toni\_46, Hocus\_46, Daffy\_47, Phareon\_47
- Track 2 : Bluephacebaby\_46, JangoPhett\_47, Schadenfreude\_46, Jesabah\_47, SassyCat97\_46, Cobra\_47, UAch1\_47, Wallhey\_46, Jillium\_46, Held\_47, GreenChile\_47, Robyn\_46, DonSanchon\_46, Potter\_46, FremontTroll\_47, Mesh1\_47, PhatLouie\_47, YouGoGlencoco\_47, Labeouficaum\_46, Matalotodo\_47, Zaider\_48, Cosmolli16\_46, Derpp\_46, Hetaeria\_47, Placalicious\_46, Swiphy\_47, Pacifista\_46, TyrionL\_46, DelRivs\_46, MitKao\_47, Zonia\_47, FriarPreacher\_46, Aelin\_46, Pinkman\_46, Kwksand96\_46, Thora\_47, Zelda\_47, Cornbread\_46, Altwerkus\_46, True\_46, GeneCoco\_47, Surely\_47, Chorkpop\_47, Virapocalypse\_47, LemonSlice\_47, Antonia\_46
- Track 3 : TooFast2Furius\_48, PhenghisKhan\_46, Chute\_46, PhrankReynolds\_45, Colbert\_47, Nova1\_47, Apizium\_47, Basato\_48, Pipsqueak\_47, Aleia\_47, Flake\_47, Mcshane\_46, Olive\_47, OliverWalter\_47, Waterdiva\_47, Coletti\_47, Schueller\_46, Phergie\_46, Thunderbird\_46, CheetO\_47
- Track 4 : ABU\_48, SallyH\_48, PhrodoBaggins\_47, Badfish\_48, LasagnaCat\_48, Katniss\_48, Orion\_48, Scoot17C\_48, Swish\_48, PhatCats2014\_48, Phamished\_48, HighStump\_47, ElvisPhasley\_48, CampRoach\_48, Craff\_48, Fringe\_48, Adriana\_48, Morty\_48, PG1\_48, RedMaple\_47, Mulan\_47, Inchworm\_48, Yoshand\_48, Pherdinand\_48, Emiris\_48, DoIOn\_50, MelsMeow\_47, Lego3393\_46, Durga\_48
- Track 5 : MiniBoss\_47, AltPhacts\_47
- Track 6 : Hamish\_47, Crownjwl\_47, Spartan300\_47, Soile\_47, Horchata\_47, Eremos\_47, Solosis\_46, AbsoluteMadLad\_46, Keitherie\_47, Gwilliam\_47, Phunky\_47, Squiggle\_47, DaddyDaniels\_47, Gophee\_47, KingTut\_38, Chuni\_46, MRabcd\_46, LeiMonet\_47, Kimbrough\_47, Daka\_48, ShiVal\_47, Anderson\_47, Jiraiya\_46, CharlieGBrown\_46, Struggle\_46, Hekos\_44, EmpTee\_47, Doddsville\_47, Jiminy\_46, Chaelin\_47, Burr\_46, Valjean\_47, Megamind20\_47, Roscoe\_48, Plata\_46, BoogieWoogie\_46, Prickles\_47, Iridoclysis\_47, Karn\_46, Riggan\_47, Boehler\_47, Bishoperium\_46, Haimas\_47, Tomlarah\_47, JakeO\_46, SirBeauregard\_47, Hartsy\_47, Larson\_48, Omniscient\_47, Suffolk\_47, Windsor\_46, Skippy\_47, Duggie\_46, PallasAthena\_47, Mutante\_46, ProfessorX\_47, Fozzie\_46,

OneBrain\_48, Blackberry\_46, Cornobble\_46, AngelCake\_47, Mecca\_46,  
Virgeve\_46, Childish\_46, Chipette\_48

- Track 7 : DoesntMatter\_46, Vaishali24\_46, FleetyMac\_47, Happabalu\_47,  
Lehmann\_47, Riverton\_47, Melc17\_47, Serpentine\_0047, Triad\_47, SilverBell\_47,  
KlimbOn\_47, Gyarad\_0047, Newman\_47, Inverness\_47
- Track 8 : Scrick\_47, Telesworld\_46, Charles1\_47, Quisquilliae\_47, HogWash\_47,  
Lulwa\_47, Slatt\_47, Tooj\_47, Piglet\_0046, ShadowBud\_47, Aonishiki\_47, JDog\_46,  
DirtJuice\_47, HSavage\_47, Podrick\_47, Buckeye\_47, Orwigg\_46, KLucky39\_47,  
Weher20\_47, Numberten\_47, Chunky\_47, Plmatters\_47, Oline\_46, Frankicide\_47,  
Dati\_47, Pops\_47, Etaye\_47
- Track 9 : LostAndPhound\_46
- Track 10 : Lulumae\_46, Banjo\_46, Vaticameos\_43, Puhltonio\_47, Caspiwai\_46,  
Murdoc\_47, Vortex\_47, TallGrassMM\_47, Roy17\_47, Xavier\_46
- Track 11 : Megatron\_48, IsaacEli\_48, Maskar\_47, Fang\_48, Nacho\_0048,  
FluffyNinja\_48, OSmaximus\_48, Chah\_49, ImtiyazSitla\_47, ThreeOh3D2\_48,  
Ashraf\_47, Trypo\_48, Kikipoo\_48, Sigman\_48
- Track 12 : Andre\_48, DuchessDung\_46
- Track 13 : FugateOSU\_46
- Track 14 : Roliet\_47, KingVeVeVe\_47, Soto\_47, Dingo\_47, Mikota\_47,  
BlueHusk\_47, Sheila\_47
- Track 15 : Harvey\_47, Nyala\_46, Oosterbaan\_47, Giraffe\_47, Mosaic\_46,  
Selr12\_47, Lopsy\_46, UncleHowie\_47, LeeLot\_47, Squid\_47, Hertubise\_47
- Track 16 : Mag7\_46, BatteryCK\_46, MichaelPhcott\_46, Magic8\_47, Nicole21\_47,  
Kailash\_47, Veritas\_46
- Track 17 : JacAttac\_48
- Track 18 : Kloppinator\_47
- Track 19 : Carthage\_45
- Track 20 : Phleuron\_46
- Track 21 : Usavi\_47
- Track 22 : Cher\_46
- Track 23 : Vivaldi\_47
- Track 24 : BlackStallion\_48
- Track 25 : SDcharge11\_47
- Track 26 : Manad\_46
- Track 27 : Mana\_46
- Track 28 : RedRaider89\_48
- Track 29 : Olak\_46
- Track 30 : Taraxa\_47
- Track 31 : Vista\_47
- Track 32 : Imvubu\_38
- Track 33 : Indlovu\_44
- Track 34 : LilMcDreamy\_43
- Track 35 : LittleMinkey\_51
- Track 36 : Zenteno07\_50
- Track 37 : BirdsNest\_48
- Track 38 : Hashim76\_48
- Track 39 : Coffee\_46, Tinciduntolum\_47, Hedgerow\_46, LilSmirk\_46, Boyle\_46,  
Eaglehorse\_46, Ares\_46, Lephleur\_46, FrenchFry\_46, Bananafish\_46, Tres\_46,  
Sabella\_45, Glass\_46, ItsyBitsy1\_46, Brownie5\_46, LizLemon\_46, West99\_46,  
Kolhan\_46, Rosebush\_45, Opia\_46
- Track 40 : Allegro\_46, Rhinoforte\_46, Arbiter\_45, Lars\_46, MasterPo\_46,  
Blocker23\_46, Holeinone\_46, TA17A\_47, Kheth\_46, Phantasmagoria\_46,  
Calamitous\_46, Faze9\_45, Kaleb\_46, Godines\_46

- Track 41 : Qyrzula\_43
- Track 42 : PrinceCharming\_46
- Track 43 : Vic9\_00045, Laurie\_45
- Track 44 : Prince\_42, Apex\_43, VioletZ\_44
- Track 45 : Zemanar\_43, JoyceMaria\_42, Lolalove\_43
- Track 46 : Lambano\_41, Epah\_41, GinPorsche\_42, Hally898\_41, Antihero\_41, Nanao\_41, LittleDigger\_41, Renkei\_41, Ahwei\_41, Poster\_41
- Track 47 : JaguarMi\_42, Xincheng\_41
- Track 48 : Fortunato\_43, Austelle\_43, Mudslide\_42, RawrgerThat\_43
- Track 49 : AlanGrant\_44, Vincenzo\_43
- Track 50 : ChrisnMich\_42, Cooper\_43
- Track 51 : Mithril\_42, BobbyK\_43, Frederick\_43, Fanaw\_41
- Track 52 : Hydro\_42, BrownCNA\_44, Waleliano\_42, Hangman\_42
- Track 53 : JAMaL\_42
- Track 54 : Heath\_41
- Track 55 : Nigel\_41
- Track 56 : Magpie\_41
- Track 57 : Stinger\_41
- Track 58 : QueenPie\_41
- Track 59 : EastView9101\_44, SirJeffery\_46, Rita130\_46, Reccee\_46, Acadian\_46, Donny\_46, Suigeneris\_46
- Track 60 : Bae\_45
- Track 61 : DigitDog\_45, Nangang\_45, Shenyu\_45
- Track 62 : Reprobate\_46, Nehemiah\_45, Mysterious\_45, Phelemich\_45
- Track 63 : Serendipitous\_45
- Track 64 : KarasumaRum\_47, StinkyVeggy\_47
- Track 65 : Rich\_44
- Track 66 : KayaCho\_39
- Track 67 : 39HC\_039, Hosp\_037, 40BC\_039
- Track 68 : ForDig\_39
- Track 69 : Jolie1\_039
- Track 70 : Saguaro\_48
- Track 71 : Thonko\_45
- Track 72 : CRB2\_48
- Track 73 : Rinkes\_46
- Track 74 : Funsized\_49
- Track 75 : Knocker\_47
- Track 76 : Quesadilla\_48
- Track 77 : PenguinLover67\_48
- Track 78 : Comrade\_252, Westy\_258
- Track 79 : Stigma\_254, Belfort\_257, SparkleGoddess\_256
- Track 80 : Karp\_256
- Track 81 : Ava3\_102
- Track 82 : Labradorite\_100, Substance289\_99, ValleyTerrace\_101, Tainan\_105, Amataga\_101, Bowman\_98, Derek\_101, BadAgartude\_97, FrayBell\_106, Pivoine\_100, GlutenPhree\_102, Tortoise16\_98, SmallFry\_101, Flabslab\_95, Ading\_101, PharkleMinkus\_105, Atlantean\_100, CindyLou\_102, Gabriel\_102, Shnickers\_101, Rahel\_100, Essence\_98, Spec\_97, Specks\_106, Drazdys\_100, Jedediah\_104, Ghost\_100, InigoMontoya\_102, Phlegm\_103, Chomp\_100, Adlitam\_101, Breeniome\_100, Naija\_100, Ngannou\_97, Audrick\_103, Tyke\_102, ShiaLabeouf\_100, Jemmno\_101, Jaygup\_101, Phusco\_101, Cleatunium\_95, Matsumoto\_99, Pupusa\_107, Guwapp\_100, InterFolia\_109, Bangla1971\_102, Latch\_101, SilverDipper\_102, ArcherS7\_100, LolaVinca\_102, Teardrop\_100,

NoodleTree\_108, Patter\_101, LordLeafolot\_106, Dessert\_98

- Track 83 : Fixie\_98, Primadonna\_95, Chargie21\_98, LinStu\_101, Zalkecks\_102, Blackbrain\_96, Stubby\_94, Basquiat\_98, Shaqnato\_94, Fongie\_99, DeejaClivia\_90, Burrough\_101, Yucca\_101, BananaFence\_100, Naval22\_106, JayJay\_107, Ewok\_102, Blackdragon\_97, JulietS\_95, Rabinovish\_99, Mangeria\_101, Maturis\_99, EasyJones\_104, Salacia\_105, Alice\_94, DirtMonster\_95, NuevoMundo\_107, Montpel\_100, FudgeTart\_101, Sebata\_103, Moby\_92, SoilZilla\_97, Moiqah\_92, ScottMcG\_98, Yassified\_98, ET08\_90, Wally\_100, Rocha\_100, QBert\_95, Cactojaque\_96, Bread\_101, OrediggerDelux\_99, Fludd\_102, Lee7\_99, CharlieB\_97, BeanWater\_93, Belieber\_97, Sauce\_102, Nidhogg\_102, Kboogie\_105, Sprinklers\_97, TinyTim\_101, Pleione\_104, Darko\_101, Quasimodo\_102, YoungMoneyMata\_102, HyRo\_93, ChickenPhender\_97, Maby2021\_101, SrishMeg2525\_100, Pinkcreek\_92
- Track 84 : BigCity\_109, IkeLoa\_95, MikeLiesIn\_102, DrPhinkDaddy\_100, Izajani\_101, Duckfeet\_94, EmToTheThree\_104, Mikro\_99, Gizmo\_105, Daffodil\_106, Pio\_105, StephanieG\_100, ChaylaJr\_96, Pier\_105, Megamind\_100, Blubba\_90, DTDevon\_102, Grasshills\_108, EggyFarm\_109, SVoro\_99, Erdmann\_102, Trinitium\_98, NedWong\_102, Delilah\_101, Zeenon\_103, LookingGlass\_102, Jessibeth14\_100, Morizzled23\_101, McWolfish\_99, Bxz1\_99, ErnieJ\_97, Roots515\_100, FoxtrotP1\_101, Khaleesi\_100, Colt\_91, Caravan\_96, Turret\_96, ParkTD\_102, Catera\_98, YemiJoy2021\_102, JustHall\_98, Bipolarisk\_100, Shelob\_103, Loanshark\_101, I3\_107, Issimir\_100, Jezreel\_101, Shrimp\_101, Iota\_96, Lethe\_100, Domi\_95, Bonray\_101, Cane17\_90, Norm\_102, Shifa\_90, ZygoTaiga\_100, Asterius\_104, MoMoMixon\_102, Dandelion\_108, JigglyPuff\_109, PurduePete\_101
- Track 85 : Phox\_98, LRRHood\_96, Ronan\_95, Dietrick\_93, Grungle\_89, Janiyra\_103, Bezza\_90, Koguma\_98, Babyland\_102, Melpomini\_95, Lunareta\_100, BackyardAgain\_98, StubbySaigey\_104, Cali\_97, EmmaElysia\_101, Lukilu\_92, Spud\_101, Napoleon13\_97
- Track 86 : Delylah\_104, Littleton\_101, Kamryn\_101, Capablanca\_103, Bigswole\_106
- Track 87 : Demodog\_108, Concombre\_108
- Track 88 : Willis\_102
- Track 89 : Rizal\_97, Astraea\_98, JPickles\_99, Gamgam\_101, LifeSavor\_100
- Track 90 : Nappy\_104
- Track 91 : McGee\_103, Ablatia\_100, BobaPhatt\_97
- Track 92 : Tonenili\_116
- Track 93 : RoMag\_96
- Track 94 : Halldule\_95
- Track 95 : Momo\_100
- Track 96 : Vortrix\_115
- Track 97 : ScoobyDoobyDoo\_226
- Track 98 : Greely\_236
- Track 99 : Myrna\_229
- Track 100 : Phabba\_239
- Track 101 : Trine\_54
- Track 102 : Mahdia\_50
- Track 103 : Puppies\_48
- Track 104 : Gustav\_54
- Track 105 : Applejacks\_53
- Track 106 : Widow\_49
- Track 107 : Frizzle\_18, Ghobes\_19
- Track 108 : Archimedes\_17

- Track 109 : Sapo\_18
- Track 110 : SCentae\_52
- Track 111 : Pupper\_52, CherryTomatoes\_54
- Track 112 : DalanDe\_65, Thales\_63
- Track 113 : TraderJ\_42, MossRose\_42, MakoManhole\_42, Yeshua\_42, CaiB\_42, Blackpen\_42, Wooper\_42
- Track 114 : AnClar\_41, Sisko\_40, Yago84\_40
- Track 115 : Coldpizza\_43
- Track 116 : Sour\_45
- Track 117 : AnarQue\_42
- Track 118 : Evaa\_40
- Track 119 : FelixTres\_42, CloverMinnie\_42
- Track 120 : JellyBelly\_40, CharlottesWeb\_40
- Track 121 : AksarBAT\_40
- Track 122 : Fresco\_40, Ligma\_40, Axumite\_40, Shatter\_40
- Track 123 : NHagos\_40
- Track 124 : Mariokart\_40
- Track 125 : LittleMunchkin\_42
- Track 126 : BiggityBass\_40
- Track 127 : BobRoss2024\_39
- Track 128 : RedWattleHog\_178, Stormageddon\_179
- Track 129 : Merry\_, Sunny\_

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

The start number called the most often in the published annotations is 87, it was called in 221 of the 607 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU\_48, AbsoluteMadLad\_46, Adriana\_48, Aelin\_46, AltPhacts\_47, Altwerkus\_46, Anderson\_47, Andre\_48, AngelCake\_47, Antonia\_46, Aonishiki\_47, Archimedes\_17, Badfish\_48, BatteryCK\_46, Beaglebox\_46, Bishoperium\_46, BlackStallion\_48, BlacksBerry\_46, BlueHusk\_47, Bluephacebaby\_46, Boehler\_47, BoogieWoogie\_46, Brilliant\_47, Buckeye\_47, Burr\_46, CamL\_47, CampRoach\_48, Cannibal\_47, Carthage\_45, Chaelin\_47, Charles1\_47, CharlieGBrown\_46, Cher\_46, Childish\_46, Chipette\_48, Chorkpop\_47, Chuni\_46, Chunky\_47, Cobra\_47, Cornbread\_46, Cornobble\_46, Cosmolli16\_46, Craff\_48, Crownjwl\_47, DaddyDaniels\_47, Daffy\_47, Daka\_48, Dati\_47, DelRivs\_46, Derpp\_46, Dice\_46, Dingo\_47, Dione\_46, DirtJuice\_47, Doddsville\_47, DolOn\_50, DonSanchon\_46, DuchessDung\_46, Duggie\_46, Durga\_48, ElvisPhasley\_48, Emiris\_48, EmpTee\_47, Eremos\_47, Etaye\_47, Eugenia\_47, Fozzie\_46, Frankicide\_47, FremontTroll\_47, Freya\_46, FriarPreacher\_46, Fringe\_48, FugateOSU\_46, Gareth\_46, GeneCoco\_47, Gophee\_47, Grand2040\_46, GreenChile\_47, Gwennie1\_47, Gwilliam\_47, HSavage\_47, Haimas\_47, Haleema\_46, Hamish\_47, Hartsy\_47, Hekos\_44, Held\_47, HenryJackson\_46, Hetaeria\_47, HighStump\_47, Hocus\_46, HogWash\_47, Horchata\_47, Inchworm\_48, Iridessa\_47, Iridoclysis\_47, JDog\_46, JakeO\_46, JangoPhett\_47, Jesabah\_47, Jillium\_46, Jiminy\_46, Jiraiya\_46, KLucky39\_47, Kahve\_46, Kailash\_47, Karn\_46, Katniss\_48, Keitherie\_47, Khan1\_47, Kimbrough\_47, KingTut\_38, KingVeVeVe\_47, Kloppinator\_47, Kwadwo\_46, Kwksand96\_46, Labeouficaum\_46, Larson\_48, LasagnaCat\_48, Lasso\_47,

Lego3393\_46, Legolas\_47, LeiMonet\_47, LemonSlice\_47, Longacauda\_46, LostAndPhound\_46, LuckyMarjie\_46, Lulwa\_47, Lumine\_46, MRabcd\_46, Mag7\_46, Magic8\_47, Mana\_46, Maru\_46, Matalotodo\_47, Mecca\_46, Megamind20\_47, MelsMeow\_47, Mesh1\_47, Mesmerelda\_46, MichaelPhcott\_46, Mikota\_47, MiniBoss\_47, MitKao\_47, Morgushi\_47, Morty\_48, MrPhizzler\_47, Mulan\_47, Mutante\_46, Nathan\_47, NiaNia\_49, Nicole21\_47, Numberten\_47, Olak\_46, Oline\_46, Omniscient\_47, OneBrain\_48, Orfeu\_46, Orion\_48, Orwigg\_46, PG1\_48, Pacifista\_46, PallasAthena\_47, Phamished\_48, Phareon\_47, PhatCats2014\_48, PhatLouie\_47, Pherdinand\_48, PhrodoBaggins\_47, Phunky\_47, Piglet\_0046, PinheadLarry\_47, Pinkman\_46, Placalicious\_46, Plata\_46, Plmatters\_47, Podrick\_47, Pops\_47, Potter\_46, Prickles\_47, ProfessorX\_47, QueenBeane\_47, Quisquillae\_47, RedMaple\_47, RedRaider89\_48, Ricotta\_46, Riggan\_47, Rimu\_47, Robyn\_46, Roliet\_47, Roscoe\_48, SallyH\_48, Samaymay\_47, SassyCat97\_46, Schadenfreude\_46, Scoot17C\_48, Scrick\_47, Serendipity\_47, ShadowBud\_47, Sheila\_47, ShiVal\_47, Simielle\_46, SirBeauregard\_47, Skippy\_47, Slatt\_47, Soile\_47, Solosis\_46, Sophia\_46, Soto\_47, Spartan300\_47, Squiggle\_47, Struggle\_46, Suffolk\_47, Surely\_47, Swiphy\_47, Swish\_48, Taraxa\_47, Telesworld\_46, Thora\_47, Timmi\_46, TomBombadil\_47, Tomlarah\_47, Toni\_46, Tooj\_47, True\_46, TyrionL\_46, UAch1\_47, Usavi\_47, Valjean\_47, Veritas\_46, Virapocalypse\_47, Virgeve\_46, Wallhey\_46, Weher20\_47, Windsor\_46, Yoshand\_48, YouGoGlencoco\_47, Zaider\_48, Zelda\_47, Zonia\_47,

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

- Aleia\_47, Apizium\_47, Ashraf\_47, Banjo\_46, Basato\_48, Caspiwai\_46, Chah\_49, CheetO\_47, Chute\_46, Colbert\_47, Coletti\_47, DoesntMatter\_46, Fang\_48, Flake\_47, FleetyMac\_47, FluffyNinja\_48, Giraffe\_47, Gyarad\_0047, Happabalu\_47, Harvey\_47, Hertubise\_47, ImtiyazSitla\_47, Inverness\_47, IsaacEli\_48, JacAttac\_48, Kikipoo\_48, KlimbOn\_47, LeeLot\_47, Lehmann\_47, LittleMinkey\_51, Lopsy\_46, Lulumae\_46, Manad\_46, Maskar\_47, Mcshane\_46, Megatron\_48, Melc17\_47, Mosaic\_46, Murdoc\_47, Nacho\_0048, Newman\_47, Nova1\_47, Nyala\_46, OSmaximus\_48, Olive\_47, OliverWalter\_47, Oosterbaan\_47, PhenghisKhan\_46, Phergie\_46, Phleuron\_46, PhrankReynolds\_45, Pipsqueak\_47, Puhltonio\_47, Riverton\_47, Roy17\_47, SDcharge11\_47, Schueller\_46, Selr12\_47, Serpentine\_0047, Sigman\_48, SilverBell\_47, Squid\_47, TallGrassMM\_47, Thonko\_45, ThreeOh3D2\_48, Thunderbird\_46, TooFast2Furious\_48, Triad\_47, Trypo\_48, UncleHowie\_47, Vaishali24\_46, Vaticameos\_43, Vista\_47, Vivaldi\_47, Vortex\_47, Waterdiva\_47, Xavier\_46, Zenteno07\_50,

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

- 39HC\_039, 40BC\_039, Ablatia\_100, Acadian\_46, Ading\_101, Adlitam\_101, Ahwei\_41, AksarBAT\_40, AlanGrant\_44, Alice\_94, Allegro\_46, Amataga\_101, AnClar\_41, AnarQue\_42, Antihero\_41, Apex\_43, Applejacks\_53, Arbiter\_45, ArcherS7\_100, Ares\_46, Asterius\_104, Astraea\_98, Atlantean\_100, Audrick\_103, Austelle\_43, Ava3\_102, Axumite\_40, Babylad\_102, BackyardAgain\_98, BadAgartude\_97, Bae\_45, BananaFence\_100, Bananafish\_46, Bangla1971\_102, Basquiat\_98, BeanWater\_93, Belfort\_257, Belieber\_97, Bezza\_90, BigCity\_109, BiggityBass\_40, Bigswole\_106, Bipolarisk\_100, BirdsNest\_48, Blackbrain\_96, Blackdragon\_97, Blackpen\_42, Blocker23\_46, Blubba\_90, BobRoss2024\_39, BobaPhatt\_97, BobbyK\_43, Bonray\_101, Bowman\_98, Boyle\_46, Bread\_101, Breeniome\_100, BrownCNA\_44, Brownie5\_46, Burrough\_101, Bxz1\_99, CRB2\_48, Cactojaque\_96, CaiB\_42, Calamitous\_46, Cali\_97, Cane17\_90, Capablanca\_103, Caravan\_96, Catera\_98, Charge21\_98, CharlieB\_97, CharlottesWeb\_40, ChaylaJr\_96, CherryTomatoes\_54, ChickenPhender\_97, Chomp\_100,

ChrisnMich\_42, CindyLou\_102, Cleatunium\_95, CloverMinnie\_42, Coffee\_46, Coldpizza\_43, Colt\_91, Comrade\_252, Concombre\_108, Cooper\_43, DTDevon\_102, Daffodil\_106, DalanDe\_65, Dandelion\_108, Darko\_101, DeejaClivia\_90, Delilah\_101, Delylah\_104, Demodog\_108, Derek\_101, Dessert\_98, Dietrick\_93, DigitDog\_45, DirtMonster\_95, Domi\_95, Donny\_46, DrPhinkDaddy\_100, Drazdys\_100, Duckfeet\_94, ET08\_90, Eaglehorse\_46, EastView9101\_44, EasyJones\_104, EggyFarm\_109, EmToTheThree\_104, EmmaElysia\_101, Epah\_41, Erdmann\_102, ErnieJ\_97, Essence\_98, Evaa\_40, Ewok\_102, Fanaw\_41, Faze9\_45, FelixTres\_42, Fixie\_98, Flabslab\_95, Fludd\_102, Fongie\_99, ForDig\_39, Fortunato\_43, FoxtrotP1\_101, FrayBell\_106, Frederick\_43, FrenchFry\_46, Fresco\_40, Frizzle\_18, FudgeTart\_101, Funsized\_49, Gabriel\_102, Gamgam\_101, Ghobes\_19, Ghost\_100, GinPorsche\_42, Gizmo\_105, Glass\_46, GlutenPhree\_102, Godines\_46, Grasshills\_108, Greely\_236, Grungle\_89, Gustav\_54, Guwapp\_100, Halldule\_95, Hally898\_41, Hangman\_42, Hashim76\_48, Heath\_41, Hedgerow\_46, Holeinone\_46, Hosp\_037, HyRo\_93, Hydro\_42, I3\_107, IkeLoa\_95, Imvubu\_38, Indlovu\_44, InigoMontoya\_102, InterFolia\_109, Iota\_96, Issimir\_100, ItsyBitsy1\_46, Izajani\_101, JAMaL\_42, JPickles\_99, JaguarMi\_42, Janiyr\_103, JayJay\_107, Jaygup\_101, Jedediah\_104, JellyBelly\_40, Jemmno\_101, Jessibeth14\_100, Jezreel\_101, JigglyPuff\_109, Jolie1\_039, JoyceMaria\_42, JulietS\_95, JustHall\_98, Kaleb\_46, Kamryn\_101, KarasumaRum\_47, Karp\_256, KayaCho\_39, Kboogie\_105, Khaleesi\_100, Kheth\_46, Knocker\_47, Koguma\_98, Kolhan\_46, LRRHood\_96, Labradorite\_100, Lambano\_41, Lars\_46, Latch\_101, Laurie\_45, Lee7\_99, Lephleur\_46, Lethe\_100, LifeSavor\_100, Ligma\_40, LilMcDreamy\_43, LilSmirk\_46, LinStu\_101, LittleDigger\_41, LittleMunchkin\_42, Littleton\_101, LizLemon\_46, Loanshark\_101, LolaVinca\_102, Lolalove\_43, LookingGlass\_102, LordLeafolot\_106, Lukilu\_92, Lunareta\_100, Maby2021\_101, Magpie\_41, Mahdia\_50, MakoManhole\_42, Mangeria\_101, Mariokart\_40, MasterPo\_46, Matsumoto\_99, Maturis\_99, McGee\_103, McWolfish\_99, Megamind\_100, Melpomini\_95, Merry\_, MikeLiesIn\_102, Mikro\_99, Mithril\_42, MoMoMixon\_102, Moby\_92, Moiqah\_92, Momo\_100, Montpel\_100, Morizzled23\_101, MossRose\_42, Mudslide\_42, Myrna\_229, Mysterious\_45, NHagos\_40, Naija\_100, Nanao\_41, Nangang\_45, Napoleon13\_97, Nappy\_104, Naval22\_106, NedWong\_102, Nehemiah\_45, Ngannou\_97, Nidhogg\_102, Nigel\_41, NoodleTree\_108, Norm\_102, NuevoMundo\_107, Opia\_46, OrediggerDelux\_99, ParkTD\_102, Patter\_101, PenguinLover67\_48, Phabba\_239, Phantasmagoria\_46, PharkleMinkus\_105, Phelemich\_45, Phlegm\_103, Phox\_98, Phusco\_101, Pier\_105, Pinkcreek\_92, Pio\_105, Pivoine\_100, Pleione\_104, Poster\_41, Primadonna\_95, PrinceCharming\_46, Prince\_42, Pupper\_52, Puppies\_48, Pupusa\_107, PurduePete\_101, QBert\_95, Quasimodo\_102, QueenPie\_41, Quesadilla\_48, Qyrzula\_43, Rabinovish\_99, Rahel\_100, RawrgerThat\_43, Reccee\_46, RedWattleHog\_178, Renkei\_41, Reprobate\_46, Rhinoforte\_46, Rich\_44, Rinkes\_46, Rita130\_46, Rizal\_97, RoMag\_96, Rocha\_100, Ronan\_95, Roots515\_100, Rosebush\_45, SCentae\_52, SVoro\_99, Sabella\_45, Saguaro\_48, Salacia\_105, Sapo\_18, Sauce\_102, ScoobyDoobyDoo\_226, ScottMcG\_98, Sebata\_103, Serendipitous\_45, Shaqnato\_94, Shatter\_40, Shelob\_103, Shenyu\_45, ShiaLabeouf\_100, Shifa\_90, Shnickers\_101, Shrimp\_101, SilverDipper\_102, SirJeffery\_46, Sisko\_40, SmallFry\_101, SoilZilla\_97, Sour\_45, SparkleGoddess\_256, Spec\_97, Specks\_106, Sprinklers\_97, Spud\_101, SrishMeg2525\_100, StephanieG\_100, Stigma\_254, Stinger\_41, StinkyVeggy\_47, Stormageddon\_179, StubbySaigey\_104, Stubby\_94, Substance289\_99, Suigeneris\_46, Sunny\_, TA17A\_47, Tainan\_105, Teardrop\_100, Thales\_63, Tinciduntolum\_47, TinyTim\_101, Tonenili\_116, Tortoise16\_98, TraderJ\_42, Tres\_46, Trine\_54, Trinitium\_98, Turret\_96, Tyke\_102, ValleyTerrace\_101, Vic9\_00045, Vincenzo\_43,

VioletZ\_44, Vortex\_115, Waleliano\_42, Wally\_100, West99\_46, Westy\_258, Widow\_49, Willis\_102, Wooper\_42, Xincheng\_41, Yago84\_40, Yassified\_98, YemiJoy2021\_102, Yeshua\_42, YoungMoneyMata\_102, Yucca\_101, Zalkecks\_102, Zeenon\_103, Zemanar\_43, ZygoTaiga\_100,

### Summary by start number:

#### Start 17:

- Found in 4 of 707 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 607
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Rinkes\_46 (B9),

#### Start 22:

- Found in 53 of 707 ( 7.5% ) of genes in pham
- Manual Annotations of this start: 46 of 607
- Called 98.1% of time when present
- Phage (with cluster) where this start called: 39HC\_039 (B6), 40BC\_039 (B6), Allegro\_46 (B2), Arbitrator\_45 (B2), Ares\_46 (B2), Bananafish\_46 (B2), BirdsNest\_48 (B13), Blocker23\_46 (B2), Boyle\_46 (B2), Brownie5\_46 (B2), CRB2\_48 (B9), Calamitous\_46 (B2), Coffee\_46 (B2), Eaglehorse\_46 (B2), Faze9\_45 (B2), ForDig\_39 (B6), FrenchFry\_46 (B2), Funsized\_49 (B9), Glass\_46 (B2), Godines\_46 (B2), Hashim76\_48 (B13), Hedgerow\_46 (B2), Holeinone\_46 (B2), Hosp\_037 (B6), Imvubu\_38 (B10), Indlovu\_44 (B11), ItsyBitsy1\_46 (B2), Jolie1\_039 (B6), Kaleb\_46 (B2), KayaCho\_39 (B6), Kheth\_46 (B2), Knocker\_47 (B9), Kolhan\_46 (B2), Lars\_46 (B2), Laurie\_45 (B2), Lephleur\_46 (B2), LilSmirk\_46 (B2), LittleMinkey\_51 (B13), LizLemon\_46 (B2), MasterPo\_46 (B2), Opia\_46 (B2), Phantasmagoria\_46 (B2), PrinceCharming\_46 (B2), Rhinoforte\_46 (B2), Rosebush\_45 (B2), Sabella\_45 (B2), TA17A\_47 (B2), Tinciduntolum\_47 (B2), Tres\_46 (B2), Vic9\_00045 (B2), West99\_46 (B2), Zenteno07\_50 (B13),

#### Start 24:

- Found in 2 of 707 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 607
- Called 50.0% of time when present
- Phage (with cluster) where this start called: LilMcDreamy\_43 (B12),

#### Start 26:

- Found in 15 of 707 ( 2.1% ) of genes in pham
- Manual Annotations of this start: 8 of 607
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian\_46 (B5), Bae\_45 (B5), DigitDog\_45 (B5), Donny\_46 (B5), EastView9101\_44 (B5), KarasumaRum\_47 (B5), Nangang\_45 (B5), Reccee\_46 (B5), Rich\_44 (B5), Rita130\_46 (B5), Serendipitous\_45 (B5), Shenyu\_45 (B5), SirJeffery\_46 (B5), StinkyVeggy\_47 (B5), Suigeneris\_46 (B5),

#### Start 27:

- Found in 1 of 707 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 607
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko\_45 (B8),

Start 29:

- Found in 39 of 707 ( 5.5% ) of genes in pham
- Manual Annotations of this start: 26 of 607
- Called 97.4% of time when present
- Phage (with cluster) where this start called: Ahwei\_41 (B4), Antihero\_41 (B4), Apex\_43 (B4), Austelle\_43 (B4), BobbyK\_43 (B4), BrownCNA\_44 (B4), ChrisnMich\_42 (B4), Cooper\_43 (B4), Epah\_41 (B4), Fanaw\_41 (B4), Fortunato\_43 (B4), Frederick\_43 (B4), GinPorsche\_42 (B4), Hally898\_41 (B4), Hangman\_42 (B4), Heath\_41 (B4), Hydro\_42 (B4), JAMaL\_42 (B4), JaguarMi\_42 (B4), JoyceMaria\_42 (B4), Lambano\_41 (B4), LittleDigger\_41 (B4), Lolalove\_43 (B4), Magpie\_41 (B4), Mithril\_42 (B4), Mudslide\_42 (B4), Nanao\_41 (B4), Nigel\_41 (B4), Poster\_41 (B4), Prince\_42 (B4), QueenPie\_41 (B4), RawrgerThat\_43 (B4), Renkei\_41 (B4), Stinger\_41 (B4), VioletZ\_44 (B4), Waleliano\_42 (B4), Xincheng\_41 (B4), Zemanar\_43 (B4),

Start 42:

- Found in 5 of 707 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 3 of 607
- Called 60.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes\_54 (DO), Pupper\_52 (DO), SCentae\_52 (DO),

Start 44:

- Found in 15 of 707 ( 2.1% ) of genes in pham
- Manual Annotations of this start: 11 of 607
- Called 93.3% of time when present
- Phage (with cluster) where this start called: AnClar\_41 (DR), Axumite\_40 (DR), BiggityBass\_40 (DR), BobRoss2024\_39 (DR), CharlottesWeb\_40 (DR), Fresco\_40 (DR), JellyBelly\_40 (DR), Ligma\_40 (DR), LittleMunchkin\_42 (DR), Mariokart\_40 (DR), Shatter\_40 (DR), Sisko\_40 (DR), Sour\_45 (DR), Yago84\_40 (DR),

Start 45:

- Found in 61 of 707 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 5 of 607
- Called 8.2% of time when present
- Phage (with cluster) where this start called: Astraea\_98 (C1), Gamgam\_101 (C1), JPickles\_99 (C1), LifeSavor\_100 (C1), Rizal\_97 (C1),

Start 50:

- Found in 2 of 707 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 2 of 607
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog\_178 (DX), Stormageddon\_179 (DX),

Start 51:

- Found in 298 of 707 ( 42.1% ) of genes in pham
- Manual Annotations of this start: 62 of 607
- Called 23.5% of time when present
- Phage (with cluster) where this start called: Aleia\_47 (B1), Apizium\_47 (B1), Ashraf\_47 (B1), Banjo\_46 (B1), Basato\_48 (B1), Caspiboi\_46 (B1), Chah\_49 (B1), CheetO\_47 (B1), Chute\_46 (B1), Colbert\_47 (B1), Coletti\_47 (B1), DoesntMatter\_46 (B1), Fang\_48 (B1), Flake\_47 (B1), FleetyMac\_47 (B1), FluffyNinja\_48 (B1),

Giraffe\_47 (B1), Gyarad\_0047 (B1), Happabalu\_47 (B1), Harvey\_47 (B1), Hertubise\_47 (B1), ImtiyazSitla\_47 (B1), Inverness\_47 (B1), IsaacEli\_48 (B1), Kikipoo\_48 (B1), KlimbOn\_47 (B1), LeeLot\_47 (B1), Lehmann\_47 (B1), Lopsy\_46 (B1), Lulumae\_46 (B1), Maskar\_47 (B1), Mcshane\_46 (B1), Megatron\_48 (B1), Melc17\_47 (B1), Mosaic\_46 (B1), Murdoc\_47 (B1), Nacho\_0048 (B1), Newman\_47 (B1), Nova1\_47 (B1), Nyala\_46 (B1), OSmaximus\_48 (B1), Olive\_47 (B1), OliverWalter\_47 (B1), Oosterbaan\_47 (B1), PhenghisKhan\_46 (B1), Phergie\_46 (B1), Phleuron\_46 (B1), PhrankReynolds\_45 (B1), Pipsqueak\_47 (B1), Puhltonio\_47 (B1), Riverton\_47 (B1), Roy17\_47 (B1), Schueller\_46 (B1), Seir12\_47 (B1), Serpentine\_0047 (B1), Sigman\_48 (B1), SilverBell\_47 (B1), Squid\_47 (B1), TallGrassMM\_47 (B1), ThreeOh3D2\_48 (B1), Thunderbird\_46 (B1), TooFast2Furius\_48 (B1), Triad\_47 (B1), Trypo\_48 (B1), UncleHowie\_47 (B1), Vaishali24\_46 (B1), Vaticameos\_43 (B1), Vortex\_47 (B1), Waterdiva\_47 (B1), Xavier\_46 (B1),

Start 53:

- Found in 300 of 707 ( 42.4% ) of genes in pham
- Manual Annotations of this start: 3 of 607
- Called 1.0% of time when present
- Phage (with cluster) where this start called: JacAttac\_48 (B1), Vista\_47 (B1), Vivaldi\_47 (B1),

Start 54:

- Found in 301 of 707 ( 42.6% ) of genes in pham
- Manual Annotations of this start: 1 of 607
- Called 0.3% of time when present
- Phage (with cluster) where this start called: Manad\_46 (B1),

Start 61:

- Found in 3 of 707 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 2 of 607
- Called 66.7% of time when present
- Phage (with cluster) where this start called: AlanGrant\_44 (B4), Vincenzo\_43 (B4),

Start 70:

- Found in 10 of 707 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 3 of 607
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Mysterious\_45 (B5), Nehemiah\_45 (B5), Phelemich\_45 (B5), Reprobate\_46 (B5),

Start 71:

- Found in 1 of 707 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 607
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sapo\_18 (DA),

Start 74:

- Found in 14 of 707 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 3 of 607
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Applejacks\_53 (CD), Mahdia\_50 (CD), SDcharge11\_47 (B1), Trine\_54 (CD),

Start 76:

- Found in 5 of 707 ( 0.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: AksarBAT\_40 (DR),

Start 82:

- Found in 3 of 707 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 3 of 607
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PenguinLover67\_48 (B9), Quesadilla\_48 (B9), Saguario\_48 (B7),

Start 83:

- Found in 15 of 707 ( 2.1% ) of genes in pham
- Manual Annotations of this start: 11 of 607
- Called 86.7% of time when present
- Phage (with cluster) where this start called: AnarQue\_42 (DR), Blackpen\_42 (DR), CaiB\_42 (DR), CloverMinnie\_42 (DR), Coldpizza\_43 (DR), Evaa\_40 (DR), FelixTres\_42 (DR), MakoManhole\_42 (DR), MossRose\_42 (DR), NHagos\_40 (DR), TraderJ\_42 (DR), Wooper\_42 (DR), Yeshua\_42 (DR),

Start 86:

- Found in 248 of 707 ( 35.1% ) of genes in pham
- Manual Annotations of this start: 180 of 607
- Called 87.9% of time when present
- Phage (with cluster) where this start called: Ablatia\_100 (C1), Ading\_101 (C1), Adlitam\_101 (C1), Alice\_94 (C1), Amataga\_101 (C1), ArcherS7\_100 (C1), Asterius\_104 (C1), Atlantean\_100 (C1), Audrick\_103 (C1), Ava3\_102 (C1), Babyland\_102 (C1), BackyardAgain\_98 (C1), BadAgartude\_97 (C1), BananaFence\_100 (C1), Bangla1971\_102 (C1), Basquiat\_98 (C1), BeanWater\_93 (C1), Belieber\_97 (C1), Bezza\_90 (C1), BigCity\_109 (C1), Bigswole\_106 (C1), Bipolarisk\_100 (C1), Blackbrain\_96 (C1), Blackdragon\_97 (C1), Blubba\_90 (C1), BobaPhatt\_97 (C1), Bonray\_101 (C1), Bowman\_98 (C1), Bread\_101 (C1), Breeniome\_100 (C1), Burrough\_101 (C1), Bxz1\_99 (C1), Cactojaque\_96 (C1), Cali\_97 (C1), Cane17\_90 (C1), Capablanca\_103 (C1), Caravan\_96 (C1), Catera\_98 (C1), Chargie21\_98 (C1), CharlieB\_97 (C1), ChaylaJr\_96 (C1), ChickenPhender\_97 (C1), Chomp\_100 (C1), CindyLou\_102 (C1), Cleatunium\_95 (C1), Colt\_91 (C1), Concombre\_108 (C1), DTDevon\_102 (C1), Daffodil\_106 (C1), Dandelion\_108 (C1), Darko\_101 (C1), DeejaClivia\_90 (C1), Delilah\_101 (C1), Delyiah\_104 (C1), Demodog\_108 (C1), Derek\_101 (C1), Dessert\_98 (C1), Dietrick\_93 (C1), DirtMonster\_95 (C1), Domi\_95 (C1), DrPhinkDaddy\_100 (C1), Drazdys\_100 (C1), Duckfeet\_94 (C1), ET08\_90 (C1), EasyJones\_104 (C1), EggyFarm\_109 (C1), EmToTheThree\_104 (C1), EmmaElysia\_101 (C1), Erdmann\_102 (C1), ErnieJ\_97 (C1), Essence\_98 (C1), Ewok\_102 (C1), Fixie\_98 (C1), Flabslab\_95 (C1), Fludd\_102 (C1), Fongie\_99 (C1), FoxtrotP1\_101 (C1), FrayBell\_106 (C1), Frizzle\_18 (DA), FudgeTart\_101 (C1), Gabriel\_102 (C1), Ghobes\_19 (DA), Ghost\_100 (C1), Gizmo\_105 (C1), GlutenPhree\_102 (C1), Grasshills\_108 (C1), Grungle\_89 (C1), Guwapp\_100 (C1), Halldule\_95 (C1), HyRo\_93 (C1), I3\_107 (C1), IkeLoa\_95 (C1), InigoMontoya\_102 (C1), InterFolia\_109 (C1), Iota\_96 (C1), Issimir\_100 (C1), Izajani\_101 (C1), Janiyra\_103 (C1), JayJay\_107 (C1), Jaygup\_101 (C1), Jedediah\_104 (C1), Jemmno\_101 (C1), Jessibeth14\_100 (C1), Jezreel\_101 (C1),

JigglyPuff\_109 (C1), JulietS\_95 (C1), JustHall\_98 (C1), Kamryn\_101 (C1), Kboogie\_105 (C1), Khaleesi\_100 (C1), Koguma\_98 (C1), LRRHood\_96 (C1), Labradorite\_100 (C1), Latch\_101 (C1), Lee7\_99 (C1), Lethe\_100 (C1), LinStu\_101 (C1), Littleton\_101 (C1), Loanshark\_101 (C1), LolaVinca\_102 (C1), LookingGlass\_102 (C1), LordLeafolot\_106 (C1), Lukilu\_92 (C1), Lunareta\_100 (C1), Maby2021\_101 (C1), Mangeria\_101 (C1), Matsumoto\_99 (C1), Maturis\_99 (C1), McGee\_103 (C1), McWolfish\_99 (C1), Megamind\_100 (C1), Melpomini\_95 (C1), MikeLiesIn\_102 (C1), Mikro\_99 (C1), MoMoMixon\_102 (C1), Moby\_92 (C1), Moiqah\_92 (C1), Momo\_100 (C1), Montpel\_100 (C1), Morizzled23\_101 (C1), Naija\_100 (C1), Napoleon13\_97 (C1), Nappy\_104 (C1), Naval22\_106 (C1), NedWong\_102 (C1), Ngannou\_97 (C1), Nidhogg\_102 (C1), NoodleTree\_108 (C1), Norm\_102 (C1), NuevoMundo\_107 (C1), OrediggerDelux\_99 (C1), ParkTD\_102 (C1), Patter\_101 (C1), PharkleMinkus\_105 (C1), Phlegm\_103 (C1), Phox\_98 (C1), Phusco\_101 (C1), Pier\_105 (C1), Pinkcreek\_92 (C1), Pio\_105 (C1), Pivoine\_100 (C1), Pleione\_104 (C1), Primadonna\_95 (C1), Puppies\_48 (CD), Pupusa\_107 (C1), PurduePete\_101 (C1), QBert\_95 (C1), Quasimodo\_102 (C1), Rabinovich\_99 (C1), Rahel\_100 (C1), RoMag\_96 (C1), Rocha\_100 (C1), Ronan\_95 (C1), Roots515\_100 (C1), SVoro\_99 (C1), Salacia\_105 (C1), Sauce\_102 (C1), ScoobyDoobyDoo\_226 (C2), ScottMcG\_98 (C1), Sebata\_103 (C1), Shaqnato\_94 (C1), Shelob\_103 (C1), ShiaLabeouf\_100 (C1), Shifa\_90 (C1), Shnickers\_101 (C1), Shrimp\_101 (C1), SilverDipper\_102 (C1), SmallFry\_101 (C1), SoilZilla\_97 (C1), Spec\_97 (C1), Specks\_106 (C1), Sprinklers\_97 (C1), Spud\_101 (C1), SrishMeg2525\_100 (C1), StephanieG\_100 (C1), StubbySaigey\_104 (C1), Stubby\_94 (C1), Substance289\_99 (C1), Tainan\_105 (C1), Teardrop\_100 (C1), TinyTim\_101 (C1), Tonenili\_116 (C1), Tortoise16\_98 (C1), Trinitium\_98 (C1), Turret\_96 (C1), Tyke\_102 (C1), ValleyTerrace\_101 (C1), Vortrix\_115 (C1), Wally\_100 (C1), Widow\_49 (CD), Willis\_102 (C1), Yassified\_98 (C1), YemiJoy2021\_102 (C1), YoungMoneyMata\_102 (C1), Yucca\_101 (C1), Zalkecks\_102 (C1), Zeenon\_103 (C1), ZygoTaiga\_100 (C1),

Start 87:

- Found in 318 of 707 ( 45.0% ) of genes in pham
- Manual Annotations of this start: 221 of 607
- Called 75.5% of time when present
- Phage (with cluster) where this start called: ABU\_48 (B1), AbsoluteMadLad\_46 (B1), Adriana\_48 (B1), Aelin\_46 (B1), AltPhacts\_47 (B1), Altwerkus\_46 (B1), Anderson\_47 (B1), Andre\_48 (B1), AngelCake\_47 (B1), Antonia\_46 (B1), Aonishiki\_47 (B1), Archimedes\_17 (DA), Badfish\_48 (B1), BatteryCK\_46 (B1), Beaglebox\_46 (B1), Bishoperium\_46 (B1), BlackStallion\_48 (B1), BlacksBerry\_46 (B1), BlueHusk\_47 (B1), Bluephacebaby\_46 (B1), Boehler\_47 (B1), BoogieWoogie\_46 (B1), Brilliant\_47 (B1), Buckeye\_47 (B1), Burr\_46 (B1), CamL\_47 (B1), CampRoach\_48 (B1), Cannibal\_47 (B1), Carthage\_45 (B1), Chaelin\_47 (B1), Charles1\_47 (B1), CharlieGBrown\_46 (B1), Cher\_46 (B1), Childish\_46 (B1), Chipette\_48 (B1), Chorkpop\_47 (B1), Chuni\_46 (B1), Chunky\_47 (B1), Cobra\_47 (B1), Cornbread\_46 (B1), Cornobble\_46 (B1), Cosmolli16\_46 (B1), Craff\_48 (B1), Crownjwl\_47 (B1), DaddyDaniels\_47 (B1), Daffy\_47 (B1), Daka\_48 (B1), Dati\_47 (B1), DelRivs\_46 (B1), Derpp\_46 (B1), Dice\_46 (B1), Dingo\_47 (B1), Dione\_46 (B1), DirtJuice\_47 (B1), Doddsville\_47 (B1), DolOn\_50 (B1), DonSanchon\_46 (B1), DuchessDung\_46 (B1), Duggie\_46 (B1), Durga\_48 (B1), ElvisPhasley\_48 (B1), Emiris\_48 (B1), EmpTee\_47 (B1), Eremos\_47 (B1), Etaye\_47 (B1), Eugenia\_47 (B1), Fozzie\_46 (B1), Frankicide\_47 (B1), FremontTroll\_47 (B1), Freya\_46 (B1), FriarPreacher\_46 (B1), Fringe\_48 (B1), FugateOSU\_46 (B1), Gareth\_46 (B1), GeneCoco\_47 (B1), Gophee\_47 (B1), Grand2040\_46 (B1), GreenChile\_47 (B1), Gwennie1\_47 (B1), Gwilliam\_47 (B1), HSavage\_47 (B1), Haimas\_47 (B1), Haleema\_46 (B1), Hamish\_47

(B1), Hartsy\_47 (B1), Hekos\_44 (B1), Held\_47 (B1), HenryJackson\_46 (B1), Hetaeria\_47 (B1), HighStump\_47 (B1), Hocus\_46 (B1), HogWash\_47 (B1), Horchata\_47 (B1), Inchworm\_48 (B1), Iridessa\_47 (B1), Iridoclysis\_47 (B1), JDog\_46 (B1), JakeO\_46 (B1), JangoPhett\_47 (B1), Jesabah\_47 (B1), Jillium\_46 (B1), Jiminy\_46 (B1), Jiraiya\_46 (B1), KLucky39\_47 (B1), Kahve\_46 (B1), Kailash\_47 (B1), Karn\_46 (B1), Katniss\_48 (B1), Keitherie\_47 (B1), Khan1\_47 (B1), Kimbrough\_47 (B1), KingTut\_38 (B1), KingVeVeVe\_47 (B1), Kloppinator\_47 (B1), Kwadwo\_46 (B1), Kwksand96\_46 (B1), Labeouficaum\_46 (B1), Larson\_48 (B1), LasagnaCat\_48 (B1), Lasso\_47 (B1), Lego3393\_46 (B1), Legolas\_47 (B1), LeiMonet\_47 (B1), LemonSlice\_47 (B1), Longacauda\_46 (B1), LostAndPhound\_46 (B1), LuckyMarjie\_46 (B1), Lulwa\_47 (B1), Lumine\_46 (B1), MRabcd\_46 (B1), Mag7\_46 (B1), Magic8\_47 (B1), Mana\_46 (B1), Maru\_46 (B1), Matalotodo\_47 (B1), Mecca\_46 (B1), Megamind20\_47 (B1), MelsMeow\_47 (B1), Mesh1\_47 (B1), Mesmerelda\_46 (B1), MichaelPhcott\_46 (B1), Mikota\_47 (B1), MiniBoss\_47 (B1), MitKao\_47 (B1), Morgushi\_47 (B1), Morty\_48 (B1), MrPhizzler\_47 (B1), Mulan\_47 (B1), Mutante\_46 (B1), Nathan\_47 (B1), NiaNia\_49 (B1), Nicole21\_47 (B1), Numberten\_47 (B1), Olak\_46 (B1), Oline\_46 (B1), Omniscient\_47 (B1), OneBrain\_48 (B1), Orfeu\_46 (B1), Orion\_48 (B1), Orwigg\_46 (B1), PG1\_48 (B1), Pacifista\_46 (B1), PallasAthena\_47 (B1), Phamished\_48 (B1), Phareon\_47 (B1), PhatCats2014\_48 (B1), PhatLouie\_47 (B1), Pherdinand\_48 (B1), PhrodoBaggins\_47 (B1), Phunky\_47 (B1), Piglet\_0046 (B1), PinheadLarry\_47 (B1), Pinkman\_46 (B1), Placalicious\_46 (B1), Plata\_46 (B1), Plmatters\_47 (B1), Podrick\_47 (B1), Pops\_47 (B1), Potter\_46 (B1), Prickles\_47 (B1), ProfessorX\_47 (B1), QueenBeane\_47 (B1), Quisquiliae\_47 (B1), RedMaple\_47 (B1), RedRaider89\_48 (B1), Ricotta\_46 (B1), Riggan\_47 (B1), Rimu\_47 (B1), Robyn\_46 (B1), Roliet\_47 (B1), Roscoe\_48 (B1), SallyH\_48 (B1), Samaymay\_47 (B1), SassyCat97\_46 (B1), Schadenfreude\_46 (B1), Scoot17C\_48 (B1), Scrick\_47 (B1), Serendipity\_47 (B1), ShadowBud\_47 (B1), Sheila\_47 (B1), ShiVal\_47 (B1), Simielle\_46 (B1), SirBeauregard\_47 (B1), Skippy\_47 (B1), Slatt\_47 (B1), Soile\_47 (B1), Solosis\_46 (B1), Sophia\_46 (B1), Soto\_47 (B1), Spartan300\_47 (B1), Squiggle\_47 (B1), Struggle\_46 (B1), Suffolk\_47 (B1), Surely\_47 (B1), Swiphy\_47 (B1), Swish\_48 (B1), Taraxa\_47 (B1), Telesworld\_46 (B1), Thora\_47 (B1), Timmi\_46 (B1), TomBombadil\_47 (B1), Tomlarah\_47 (B1), Toni\_46 (B1), Tooj\_47 (B1), True\_46 (B1), TyrionL\_46 (B1), UAch1\_47 (B1), Usavi\_47 (B1), Valjean\_47 (B1), Veritas\_46 (B1), Virapocalypse\_47 (B1), Virgeve\_46 (B1), Wallhey\_46 (B1), Weher20\_47 (B1), Windsor\_46 (B1), Yoshand\_48 (B1), YouGoGlencoco\_47 (B1), Zaider\_48 (B1), Zelda\_47 (B1), Zonia\_47 (B1),

#### Start 88:

- Found in 48 of 707 ( 6.8% ) of genes in pham
- Manual Annotations of this start: 2 of 607
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Greely\_236 (C2), Myrna\_229 (C2), Phabba\_239 (C2),

#### Start 89:

- Found in 2 of 707 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 607
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DalanDe\_65 (DQ), Thales\_63 (DQ),

#### Start 113:

- Found in 344 of 707 ( 48.7% ) of genes in pham
- Manual Annotations of this start: 1 of 607

- Called 0.3% of time when present
- Phage (with cluster) where this start called: Qyrzula\_43 (B2),

Start 116:

- Found in 2 of 707 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 2 of 607
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Merry\_ (EC), Sunny\_ (EC),

Start 121:

- Found in 3 of 707 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 607
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Gustav\_54 (CD),

Start 124:

- Found in 6 of 707 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 6 of 607
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort\_257 (BK1), Comrade\_252 (BK1), Karp\_256 (BK1), SparkleGoddess\_256 (BK1), Stigma\_254 (BK1), Westy\_258 (BK1),

### **Summary by clusters:**

There are 22 clusters represented in this pham: DO, DX, DA, B12, B13, B10, B11, DR, DQ, C2, C1, EC, CD, BK1, B4, B5, B6, B7, B1, B2, B8, B9,

Info for manual annotations of cluster B1:

- Start number 51 was manually annotated 62 times for cluster B1.
- Start number 53 was manually annotated 3 times for cluster B1.
- Start number 54 was manually annotated 1 time for cluster B1.
- Start number 74 was manually annotated 1 time for cluster B1.
- Start number 87 was manually annotated 220 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 22 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 22 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 24 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 22 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 22 was manually annotated 36 times for cluster B2.
- Start number 113 was manually annotated 1 time for cluster B2.

Info for manual annotations of cluster B4:

- Start number 29 was manually annotated 26 times for cluster B4.
- Start number 61 was manually annotated 2 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 26 was manually annotated 8 times for cluster B5.
- Start number 70 was manually annotated 3 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 22 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster B7:

- Start number 82 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 27 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 17 was manually annotated 1 time for cluster B9.
- Start number 22 was manually annotated 3 times for cluster B9.
- Start number 82 was manually annotated 2 times for cluster B9.

Info for manual annotations of cluster BK1:

- Start number 124 was manually annotated 6 times for cluster BK1.

Info for manual annotations of cluster C1:

- Start number 45 was manually annotated 5 times for cluster C1.
- Start number 86 was manually annotated 175 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 86 was manually annotated 1 time for cluster C2.
- Start number 88 was manually annotated 2 times for cluster C2.

Info for manual annotations of cluster CD:

- Start number 74 was manually annotated 2 times for cluster CD.
- Start number 86 was manually annotated 2 times for cluster CD.
- Start number 121 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster DA:

- Start number 71 was manually annotated 1 time for cluster DA.
- Start number 86 was manually annotated 2 times for cluster DA.
- Start number 87 was manually annotated 1 time for cluster DA.

Info for manual annotations of cluster DO:

- Start number 42 was manually annotated 3 times for cluster DO.

Info for manual annotations of cluster DQ:

- Start number 89 was manually annotated 1 time for cluster DQ.

Info for manual annotations of cluster DR:

- Start number 44 was manually annotated 11 times for cluster DR.
- Start number 83 was manually annotated 11 times for cluster DR.

Info for manual annotations of cluster DX:

- Start number 50 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster EC:

•Start number 116 was manually annotated 2 times for cluster EC.

**Gene Information:**

Gene: 39HC\_039 Start: 38257, Stop: 37487, Start Num: 22

Candidate Starts for 39HC\_039:

(Start: 22 @38257 has 46 MA's), (31, 38218), (78, 38110), (80, 38098), (Start: 88 @38074 has 2 MA's), (109, 37996), (176, 37810), (177, 37807), (180, 37786), (195, 37705), (199, 37690),

Gene: 40BC\_039 Start: 38257, Stop: 37487, Start Num: 22

Candidate Starts for 40BC\_039:

(Start: 22 @38257 has 46 MA's), (31, 38218), (78, 38110), (80, 38098), (Start: 88 @38074 has 2 MA's), (109, 37996), (176, 37810), (177, 37807), (180, 37786), (195, 37705), (199, 37690),

Gene: ABU\_48 Start: 40410, Stop: 39850, Start Num: 87

Candidate Starts for ABU\_48:

(Start: 51 @40494 has 62 MA's), (Start: 53 @40488 has 3 MA's), (Start: 54 @40485 has 1 MA's), (Start: 87 @40410 has 221 MA's), (Start: 113 @40341 has 1 MA's), (115, 40338), (117, 40335), (138, 40281), (195, 40068),

Gene: Ablatia\_100 Start: 50692, Stop: 51324, Start Num: 86

Candidate Starts for Ablatia\_100:

(Start: 86 @50692 has 180 MA's), (188, 51031), (207, 51109), (223, 51217), (232, 51319),

Gene: AbsoluteMadLad\_46 Start: 40287, Stop: 39727, Start Num: 87

Candidate Starts for AbsoluteMadLad\_46:

(Start: 51 @40371 has 62 MA's), (Start: 53 @40365 has 3 MA's), (Start: 54 @40362 has 1 MA's), (Start: 87 @40287 has 221 MA's), (Start: 113 @40218 has 1 MA's), (115, 40215), (117, 40212), (138, 40158), (195, 39945), (228, 39738),

Gene: Acadian\_46 Start: 40902, Stop: 40117, Start Num: 26

Candidate Starts for Acadian\_46:

(Start: 26 @40902 has 8 MA's), (48, 40815), (79, 40740), (Start: 88 @40713 has 2 MA's), (119, 40614), (195, 40335), (199, 40320),

Gene: Ading\_101 Start: 51076, Stop: 51708, Start Num: 86

Candidate Starts for Ading\_101:

(Start: 45 @50989 has 5 MA's), (Start: 86 @51076 has 180 MA's), (188, 51415), (207, 51493), (223, 51601), (232, 51703),

Gene: Adlitam\_101 Start: 51093, Stop: 51725, Start Num: 86

Candidate Starts for Adlitam\_101:

(Start: 45 @51006 has 5 MA's), (Start: 86 @51093 has 180 MA's), (188, 51432), (207, 51510), (223, 51618), (232, 51720),

Gene: Adriana\_48 Start: 40408, Stop: 39848, Start Num: 87

Candidate Starts for Adriana\_48:

(Start: 51 @40492 has 62 MA's), (Start: 53 @40486 has 3 MA's), (Start: 54 @40483 has 1 MA's), (Start: 87 @40408 has 221 MA's), (Start: 113 @40339 has 1 MA's), (115, 40336), (117, 40333), (138, 40279), (195, 40066),

Gene: Aelin\_46 Start: 39839, Stop: 39279, Start Num: 87

Candidate Starts for Aelin\_46:

(Start: 51 @39923 has 62 MA's), (Start: 53 @39917 has 3 MA's), (Start: 54 @39914 has 1 MA's),  
(Start: 87 @39839 has 221 MA's), (Start: 113 @39770 has 1 MA's), (115, 39767), (117, 39764), (177,  
39599), (195, 39497), (228, 39290),

Gene: Ahwei\_41 Start: 39395, Stop: 38667, Start Num: 29

Candidate Starts for Ahwei\_41:

(Start: 29 @39395 has 26 MA's), (78, 39254), (84, 39233), (Start: 88 @39218 has 2 MA's), (126,  
39113), (175, 38993), (177, 38987), (195, 38885), (210, 38840),

Gene: AksarBAT\_40 Start: 34482, Stop: 33889, Start Num: 76

Candidate Starts for AksarBAT\_40:

(1, 34971), (6, 34806), (Start: 42 @34560 has 3 MA's), (55, 34527), (Start: 70 @34491 has 3 MA's),  
(76, 34482), (Start: 83 @34452 has 11 MA's), (107, 34383), (141, 34296), (164, 34221), (190, 34131),  
(211, 34044), (227, 33909),

Gene: AlanGrant\_44 Start: 41068, Stop: 40448, Start Num: 61

Candidate Starts for AlanGrant\_44:

(Start: 61 @41068 has 2 MA's), (111, 40942), (123, 40909), (135, 40882), (146, 40849), (175, 40774),  
(177, 40768), (190, 40702), (210, 40621), (224, 40528), (228, 40459),

Gene: Aleia\_47 Start: 39928, Stop: 39290, Start Num: 51

Candidate Starts for Aleia\_47:

(Start: 51 @39928 has 62 MA's), (Start: 53 @39922 has 3 MA's), (Start: 54 @39919 has 1 MA's),  
(Start: 87 @39844 has 221 MA's), (Start: 113 @39781 has 1 MA's), (115, 39778), (117, 39775), (138,  
39721), (195, 39508), (228, 39301),

Gene: Alice\_94 Start: 49991, Stop: 50623, Start Num: 86

Candidate Starts for Alice\_94:

(Start: 86 @49991 has 180 MA's), (188, 50330), (207, 50408), (223, 50516), (232, 50618),

Gene: Allegro\_46 Start: 40703, Stop: 39927, Start Num: 22

Candidate Starts for Allegro\_46:

(Start: 22 @40703 has 46 MA's), (37, 40649), (48, 40604), (78, 40547), (79, 40538), (80, 40535), (84,  
40526), (108, 40439), (Start: 113 @40424 has 1 MA's), (145, 40340), (177, 40247), (186, 40196), (195,  
40145), (208, 40106),

Gene: AltPhacts\_47 Start: 40259, Stop: 39699, Start Num: 87

Candidate Starts for AltPhacts\_47:

(Start: 74 @40301 has 3 MA's), (Start: 87 @40259 has 221 MA's), (Start: 113 @40190 has 1 MA's),  
(115, 40187), (117, 40184), (195, 39917), (214, 39851), (228, 39710),

Gene: Altwerkus\_46 Start: 39966, Stop: 39406, Start Num: 87

Candidate Starts for Altwerkus\_46:

(Start: 51 @40050 has 62 MA's), (Start: 53 @40044 has 3 MA's), (Start: 54 @40041 has 1 MA's),  
(Start: 87 @39966 has 221 MA's), (Start: 113 @39897 has 1 MA's), (115, 39894), (117, 39891), (177,  
39726), (195, 39624), (228, 39417),

Gene: Amataga\_101 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for Amataga\_101:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223, 50863), (232, 50965),

Gene: AnClar\_41 Start: 36812, Stop: 36102, Start Num: 44

Candidate Starts for AnClar\_41:

(Start: 44 @36812 has 11 MA's), (114, 36614), (145, 36521), (177, 36416), (195, 36314), (199, 36299), (213, 36251),

Gene: AnarQue\_42 Start: 35868, Stop: 35293, Start Num: 83

Candidate Starts for AnarQue\_42:

(Start: 83 @35868 has 11 MA's), (99, 35829), (140, 35718), (155, 35679), (184, 35556), (188, 35544), (190, 35535), (197, 35493), (199, 35490), (203, 35478),

Gene: Anderson\_47 Start: 40265, Stop: 39705, Start Num: 87

Candidate Starts for Anderson\_47:

(Start: 51 @40349 has 62 MA's), (Start: 53 @40343 has 3 MA's), (Start: 54 @40340 has 1 MA's), (Start: 87 @40265 has 221 MA's), (Start: 113 @40196 has 1 MA's), (115, 40193), (117, 40190), (138, 40136), (195, 39923), (228, 39716),

Gene: Andre\_48 Start: 40402, Stop: 39842, Start Num: 87

Candidate Starts for Andre\_48:

(Start: 51 @40486 has 62 MA's), (Start: 53 @40480 has 3 MA's), (Start: 54 @40477 has 1 MA's), (Start: 87 @40402 has 221 MA's), (Start: 113 @40333 has 1 MA's), (115, 40330), (117, 40327), (195, 40060),

Gene: AngelCake\_47 Start: 40287, Stop: 39727, Start Num: 87

Candidate Starts for AngelCake\_47:

(Start: 51 @40371 has 62 MA's), (Start: 53 @40365 has 3 MA's), (Start: 54 @40362 has 1 MA's), (Start: 87 @40287 has 221 MA's), (Start: 113 @40218 has 1 MA's), (115, 40215), (117, 40212), (138, 40158), (195, 39945), (228, 39738),

Gene: Antihero\_41 Start: 39395, Stop: 38667, Start Num: 29

Candidate Starts for Antihero\_41:

(Start: 29 @39395 has 26 MA's), (78, 39254), (84, 39233), (Start: 88 @39218 has 2 MA's), (126, 39113), (175, 38993), (177, 38987), (195, 38885), (210, 38840),

Gene: Antonia\_46 Start: 39839, Stop: 39279, Start Num: 87

Candidate Starts for Antonia\_46:

(Start: 51 @39923 has 62 MA's), (Start: 53 @39917 has 3 MA's), (Start: 54 @39914 has 1 MA's), (Start: 87 @39839 has 221 MA's), (Start: 113 @39770 has 1 MA's), (115, 39767), (117, 39764), (177, 39599), (195, 39497), (228, 39290),

Gene: Aonishiki\_47 Start: 40308, Stop: 39748, Start Num: 87

Candidate Starts for Aonishiki\_47:

(Start: 51 @40392 has 62 MA's), (Start: 53 @40386 has 3 MA's), (Start: 54 @40383 has 1 MA's), (Start: 87 @40308 has 221 MA's), (Start: 113 @40239 has 1 MA's), (115, 40236), (117, 40233), (138, 40179), (177, 40068), (195, 39966), (228, 39759),

Gene: Apex\_43 Start: 40637, Stop: 39879, Start Num: 29

Candidate Starts for Apex\_43:

(Start: 29 @40637 has 26 MA's), (41, 40568), (Start: 86 @40460 has 180 MA's), (97, 40430), (115, 40382), (120, 40370), (139, 40325), (173, 40214), (177, 40199), (195, 40097), (210, 40052), (214, 40031), (217, 40013), (227, 39905),

Gene: Apizium\_47 Start: 40250, Stop: 39606, Start Num: 51

Candidate Starts for Apizium\_47:

(Start: 51 @40250 has 62 MA's), (Start: 53 @40244 has 3 MA's), (Start: 54 @40241 has 1 MA's), (Start: 87 @40166 has 221 MA's), (Start: 113 @40097 has 1 MA's), (115, 40094), (117, 40091), (138, 40037), (195, 39824), (228, 39617),

Gene: Applejacks\_53 Start: 38314, Stop: 37676, Start Num: 74

Candidate Starts for Applejacks\_53:

(56, 38347), (73, 38317), (Start: 74 @38314 has 3 MA's), (100, 38221), (106, 38200), (109, 38188), (128, 38119), (130, 38116), (177, 37993), (187, 37939), (190, 37927), (195, 37891), (209, 37849), (224, 37750),

Gene: Arbiter\_45 Start: 40777, Stop: 40013, Start Num: 22

Candidate Starts for Arbiter\_45:

(Start: 22 @40777 has 46 MA's), (37, 40735), (48, 40690), (78, 40633), (79, 40624), (80, 40621), (84, 40612), (108, 40525), (Start: 113 @40510 has 1 MA's), (145, 40426), (177, 40333), (186, 40282), (195, 40231), (208, 40192),

Gene: ArcherS7\_100 Start: 50656, Stop: 51288, Start Num: 86

Candidate Starts for ArcherS7\_100:

(Start: 45 @50569 has 5 MA's), (Start: 86 @50656 has 180 MA's), (188, 50995), (207, 51073), (223, 51181), (232, 51283),

Gene: Archimedes\_17 Start: 16783, Stop: 16172, Start Num: 87

Candidate Starts for Archimedes\_17:

(Start: 87 @16783 has 221 MA's), (110, 16720), (186, 16441), (200, 16372), (204, 16360), (208, 16351), (211, 16333), (221, 16267), (228, 16183),

Gene: Ares\_46 Start: 40761, Stop: 39997, Start Num: 22

Candidate Starts for Ares\_46:

(Start: 22 @40761 has 46 MA's), (48, 40674), (78, 40617), (79, 40608), (80, 40605), (84, 40596), (108, 40509), (Start: 113 @40494 has 1 MA's), (145, 40410), (177, 40317), (186, 40266), (195, 40215), (208, 40176),

Gene: Ashraf\_47 Start: 40051, Stop: 39407, Start Num: 51

Candidate Starts for Ashraf\_47:

(Start: 51 @40051 has 62 MA's), (Start: 53 @40045 has 3 MA's), (Start: 54 @40042 has 1 MA's), (Start: 87 @39967 has 221 MA's), (Start: 113 @39898 has 1 MA's), (115, 39895), (117, 39892), (138, 39838), (195, 39625),

Gene: Asterius\_104 Start: 51325, Stop: 51963, Start Num: 86

Candidate Starts for Asterius\_104:

(Start: 86 @51325 has 180 MA's), (188, 51670), (207, 51748), (223, 51856), (232, 51958),

Gene: Astraea\_98 Start: 50020, Stop: 50739, Start Num: 45

Candidate Starts for Astraea\_98:

(Start: 45 @50020 has 5 MA's), (Start: 86 @50107 has 180 MA's), (188, 50446), (207, 50524), (223, 50632), (232, 50734),

Gene: Atlantean\_100 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for Atlantean\_100:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223, 50863), (232, 50965),

Gene: Audrick\_103 Start: 50317, Stop: 50949, Start Num: 86

Candidate Starts for Audrick\_103:

(Start: 45 @50230 has 5 MA's), (Start: 86 @50317 has 180 MA's), (188, 50656), (207, 50734), (223, 50842), (232, 50944),

Gene: Austelle\_43 Start: 41087, Stop: 40329, Start Num: 29

Candidate Starts for Austelle\_43:

(Start: 29 @41087 has 26 MA's), (41, 41018), (Start: 86 @40910 has 180 MA's), (97, 40880), (115, 40832), (120, 40820), (139, 40775), (173, 40664), (177, 40649), (195, 40547), (210, 40502), (217, 40463), (227, 40355),

Gene: Ava3\_102 Start: 51251, Stop: 51883, Start Num: 86

Candidate Starts for Ava3\_102:

(Start: 86 @51251 has 180 MA's), (188, 51590), (223, 51776), (232, 51878),

Gene: Axumite\_40 Start: 34038, Stop: 33349, Start Num: 44

Candidate Starts for Axumite\_40:

(28, 34119), (39, 34071), (Start: 44 @34038 has 11 MA's), (99, 33888), (103, 33876), (105, 33867), (180, 33642), (195, 33561), (199, 33546), (213, 33498),

Gene: Babyland\_102 Start: 50426, Stop: 51058, Start Num: 86

Candidate Starts for Babyland\_102:

(Start: 86 @50426 has 180 MA's), (188, 50765), (207, 50843), (223, 50951), (232, 51053),

Gene: BackyardAgain\_98 Start: 50256, Stop: 50888, Start Num: 86

Candidate Starts for BackyardAgain\_98:

(Start: 86 @50256 has 180 MA's), (188, 50595), (207, 50673), (223, 50781), (232, 50883),

Gene: BadAgartude\_97 Start: 51776, Stop: 52408, Start Num: 86

Candidate Starts for BadAgartude\_97:

(Start: 45 @51689 has 5 MA's), (Start: 86 @51776 has 180 MA's), (188, 52115), (207, 52193), (223, 52301), (232, 52403),

Gene: Badfish\_48 Start: 40433, Stop: 39873, Start Num: 87

Candidate Starts for Badfish\_48:

(Start: 51 @40517 has 62 MA's), (Start: 53 @40511 has 3 MA's), (Start: 54 @40508 has 1 MA's), (Start: 87 @40433 has 221 MA's), (Start: 113 @40364 has 1 MA's), (115, 40361), (117, 40358), (138, 40304), (195, 40091),

Gene: Bae\_45 Start: 40787, Stop: 40020, Start Num: 26

Candidate Starts for Bae\_45:

(Start: 26 @40787 has 8 MA's), (64, 40664), (79, 40625), (Start: 88 @40598 has 2 MA's), (119, 40499), (145, 40424), (157, 40391), (177, 40340), (195, 40238), (196, 40232), (199, 40223),

Gene: BananaFence\_100 Start: 51510, Stop: 52142, Start Num: 86

Candidate Starts for BananaFence\_100:

(Start: 86 @51510 has 180 MA's), (188, 51849), (207, 51927), (223, 52035), (232, 52137),

Gene: Bananafish\_46 Start: 40697, Stop: 39933, Start Num: 22

Candidate Starts for Bananafish\_46:

(Start: 22 @40697 has 46 MA's), (48, 40610), (78, 40553), (79, 40544), (80, 40541), (84, 40532), (108, 40445), (Start: 113 @40430 has 1 MA's), (145, 40346), (177, 40253), (186, 40202), (195, 40151), (208, 40112),

Gene: Bangla1971\_102 Start: 50786, Stop: 51418, Start Num: 86

Candidate Starts for Bangla1971\_102:

(Start: 45 @50699 has 5 MA's), (Start: 86 @50786 has 180 MA's), (188, 51125), (207, 51203), (223, 51311), (232, 51413),

Gene: Banjo\_46 Start: 40048, Stop: 39410, Start Num: 51

Candidate Starts for Banjo\_46:

(Start: 51 @40048 has 62 MA's), (Start: 53 @40042 has 3 MA's), (Start: 54 @40039 has 1 MA's), (Start: 87 @39964 has 221 MA's), (Start: 113 @39901 has 1 MA's), (115, 39898), (117, 39895), (138, 39841), (195, 39628), (214, 39562), (228, 39421),

Gene: Basato\_48 Start: 40633, Stop: 39989, Start Num: 51

Candidate Starts for Basato\_48:

(Start: 51 @40633 has 62 MA's), (Start: 53 @40627 has 3 MA's), (Start: 54 @40624 has 1 MA's), (Start: 87 @40549 has 221 MA's), (Start: 113 @40480 has 1 MA's), (115, 40477), (117, 40474), (138, 40420), (195, 40207), (228, 40000),

Gene: Basquiat\_98 Start: 50225, Stop: 50857, Start Num: 86

Candidate Starts for Basquiat\_98:

(Start: 86 @50225 has 180 MA's), (188, 50564), (207, 50642), (223, 50750), (232, 50852),

Gene: BatteryCK\_46 Start: 39892, Stop: 39332, Start Num: 87

Candidate Starts for BatteryCK\_46:

(Start: 51 @39976 has 62 MA's), (Start: 53 @39970 has 3 MA's), (Start: 54 @39967 has 1 MA's), (Start: 87 @39892 has 221 MA's), (115, 39820), (117, 39817), (138, 39763), (177, 39652), (195, 39550), (228, 39343),

Gene: Beaglebox\_46 Start: 39985, Stop: 39431, Start Num: 87

Candidate Starts for Beaglebox\_46:

(Start: 51 @40069 has 62 MA's), (Start: 53 @40063 has 3 MA's), (Start: 54 @40060 has 1 MA's), (Start: 87 @39985 has 221 MA's), (Start: 113 @39922 has 1 MA's), (115, 39919), (117, 39916), (138, 39862), (195, 39649), (214, 39583), (228, 39442),

Gene: BeanWater\_93 Start: 51106, Stop: 51738, Start Num: 86

Candidate Starts for BeanWater\_93:

(Start: 86 @51106 has 180 MA's), (188, 51445), (207, 51523), (223, 51631), (232, 51733),

Gene: Belfort\_257 Start: 123112, Stop: 123585, Start Num: 124

Candidate Starts for Belfort\_257:

(118, 123094), (Start: 124 @123112 has 6 MA's), (170, 123238), (172, 123241), (179, 123274), (194, 123349), (201, 123385), (215, 123442), (218, 123460), (227, 123565),

Gene: Belieber\_97 Start: 50572, Stop: 51204, Start Num: 86

Candidate Starts for Belieber\_97:

(Start: 86 @50572 has 180 MA's), (188, 50911), (207, 50989), (223, 51097), (232, 51199),

Gene: Bezza\_90 Start: 50531, Stop: 51163, Start Num: 86

Candidate Starts for Bezza\_90:

(Start: 86 @50531 has 180 MA's), (188, 50870), (207, 50948), (223, 51056), (232, 51158),

Gene: BigCity\_109 Start: 53767, Stop: 54399, Start Num: 86

Candidate Starts for BigCity\_109:

(Start: 86 @53767 has 180 MA's), (188, 54106), (207, 54184), (223, 54292), (232, 54394),

Gene: BiggityBass\_40 Start: 36280, Stop: 35564, Start Num: 44

Candidate Starts for BiggityBass\_40:

(Start: 44 @36280 has 11 MA's), (Start: 83 @36193 has 11 MA's), (145, 35992), (153, 35971), (177, 35878), (195, 35776), (199, 35761), (213, 35713),

Gene: Bigswole\_106 Start: 54293, Stop: 54931, Start Num: 86

Candidate Starts for Bigswole\_106:

(40, 54182), (Start: 86 @54293 has 180 MA's), (188, 54638), (207, 54716), (223, 54824), (232, 54926),

Gene: Bipolarisk\_100 Start: 51503, Stop: 52141, Start Num: 86

Candidate Starts for Bipolarisk\_100:

(Start: 86 @51503 has 180 MA's), (188, 51848), (207, 51926), (223, 52034), (232, 52136),

Gene: BirdsNest\_48 Start: 39192, Stop: 38389, Start Num: 22

Candidate Starts for BirdsNest\_48:

(2, 39444), (3, 39432), (11, 39270), (12, 39267), (14, 39252), (15, 39237), (16, 39231), (Start: 22 @39192 has 46 MA's), (46, 39087), (49, 39081), (80, 39009), (Start: 88 @38985 has 2 MA's), (94, 38961), (120, 38880), (177, 38709), (195, 38604), (208, 38565),

Gene: Bishoperium\_46 Start: 39979, Stop: 39419, Start Num: 87

Candidate Starts for Bishoperium\_46:

(Start: 51 @40063 has 62 MA's), (Start: 53 @40057 has 3 MA's), (Start: 54 @40054 has 1 MA's), (Start: 87 @39979 has 221 MA's), (Start: 113 @39910 has 1 MA's), (115, 39907), (117, 39904), (138, 39850), (195, 39637), (228, 39430),

Gene: BlackStallion\_48 Start: 40419, Stop: 39859, Start Num: 87

Candidate Starts for BlackStallion\_48:

(Start: 87 @40419 has 221 MA's), (Start: 113 @40350 has 1 MA's), (115, 40347), (117, 40344), (138, 40290), (195, 40077),

Gene: Blackbrain\_96 Start: 49803, Stop: 50435, Start Num: 86

Candidate Starts for Blackbrain\_96:

(Start: 86 @49803 has 180 MA's), (188, 50142), (207, 50220), (223, 50328), (232, 50430),

Gene: Blackdragon\_97 Start: 50933, Stop: 51565, Start Num: 86

Candidate Starts for Blackdragon\_97:

(Start: 86 @50933 has 180 MA's), (188, 51272), (207, 51350), (223, 51458), (232, 51560),

Gene: Blackpen\_42 Start: 35286, Stop: 34711, Start Num: 83

Candidate Starts for Blackpen\_42:

(Start: 83 @35286 has 11 MA's), (99, 35247), (140, 35136), (155, 35097), (184, 34974), (188, 34962), (190, 34953), (197, 34911), (199, 34908), (200, 34905), (203, 34896),

Gene: BlacksBerry\_46 Start: 40000, Stop: 39440, Start Num: 87

Candidate Starts for BlacksBerry\_46:

(Start: 51 @40084 has 62 MA's), (Start: 53 @40078 has 3 MA's), (Start: 54 @40075 has 1 MA's), (Start: 87 @40000 has 221 MA's), (Start: 113 @39931 has 1 MA's), (115, 39928), (117, 39925), (138, 39871), (195, 39658), (228, 39451),

Gene: Blocker23\_46 Start: 40815, Stop: 40051, Start Num: 22

Candidate Starts for Blocker23\_46:

(Start: 22 @40815 has 46 MA's), (37, 40773), (48, 40728), (78, 40671), (79, 40662), (80, 40659), (84, 40650), (108, 40563), (Start: 113 @40548 has 1 MA's), (145, 40464), (177, 40371), (186, 40320), (195, 40269), (208, 40230),

Gene: Blubba\_90 Start: 49899, Stop: 50531, Start Num: 86

Candidate Starts for Blubba\_90:

(Start: 86 @49899 has 180 MA's), (188, 50238), (207, 50316), (223, 50424), (232, 50526),

Gene: BlueHusk\_47 Start: 39784, Stop: 39224, Start Num: 87

Candidate Starts for BlueHusk\_47:

(Start: 74 @39826 has 3 MA's), (Start: 87 @39784 has 221 MA's), (Start: 113 @39715 has 1 MA's), (115, 39712), (117, 39709), (138, 39655), (195, 39442), (228, 39235),

Gene: Bluephacebaby\_46 Start: 39982, Stop: 39422, Start Num: 87

Candidate Starts for Bluephacebaby\_46:

(Start: 51 @40066 has 62 MA's), (Start: 53 @40060 has 3 MA's), (Start: 54 @40057 has 1 MA's), (Start: 87 @39982 has 221 MA's), (Start: 113 @39913 has 1 MA's), (115, 39910), (117, 39907), (177, 39742), (195, 39640), (228, 39433),

Gene: BobRoss2024\_39 Start: 34120, Stop: 33434, Start Num: 44

Candidate Starts for BobRoss2024\_39:

(33, 34183), (Start: 44 @34120 has 11 MA's), (145, 33823), (148, 33811), (171, 33766), (177, 33748), (195, 33646), (199, 33631), (226, 33469),

Gene: BobaPhatt\_97 Start: 49856, Stop: 50488, Start Num: 86

Candidate Starts for BobaPhatt\_97:

(Start: 86 @49856 has 180 MA's), (188, 50195), (207, 50273), (223, 50381), (232, 50483),

Gene: BobbyK\_43 Start: 40432, Stop: 39698, Start Num: 29

Candidate Starts for BobbyK\_43:

(Start: 29 @40432 has 26 MA's), (Start: 86 @40258 has 180 MA's), (97, 40228), (115, 40180), (120, 40168), (175, 40024), (177, 40018), (195, 39916), (210, 39871), (217, 39832), (227, 39724),

Gene: Boehler\_47 Start: 40288, Stop: 39728, Start Num: 87

Candidate Starts for Boehler\_47:

(Start: 51 @40372 has 62 MA's), (Start: 53 @40366 has 3 MA's), (Start: 54 @40363 has 1 MA's), (Start: 87 @40288 has 221 MA's), (Start: 113 @40219 has 1 MA's), (115, 40216), (117, 40213), (138, 40159), (195, 39946), (228, 39739),

Gene: Bonray\_101 Start: 51676, Stop: 52314, Start Num: 86

Candidate Starts for Bonray\_101:

(Start: 86 @51676 has 180 MA's), (188, 52021), (207, 52099), (223, 52207), (232, 52309),

Gene: BoogieWoogie\_46 Start: 39969, Stop: 39409, Start Num: 87

Candidate Starts for BoogieWoogie\_46:

(Start: 51 @40053 has 62 MA's), (Start: 53 @40047 has 3 MA's), (Start: 54 @40044 has 1 MA's), (Start: 87 @39969 has 221 MA's), (Start: 113 @39900 has 1 MA's), (115, 39897), (117, 39894), (138, 39840), (195, 39627), (228, 39420),

Gene: Bowman\_98 Start: 51243, Stop: 51875, Start Num: 86

Candidate Starts for Bowman\_98:

(Start: 45 @51156 has 5 MA's), (Start: 86 @51243 has 180 MA's), (188, 51582), (207, 51660), (223, 51768), (232, 51870),

Gene: Boyle\_46 Start: 40816, Stop: 40052, Start Num: 22

Candidate Starts for Boyle\_46:

(Start: 22 @40816 has 46 MA's), (48, 40729), (78, 40672), (79, 40663), (80, 40660), (84, 40651), (108, 40564), (Start: 113 @40549 has 1 MA's), (145, 40465), (177, 40372), (186, 40321), (195, 40270), (208, 40231),

Gene: Bread\_101 Start: 51337, Stop: 51969, Start Num: 86

Candidate Starts for Bread\_101:

(Start: 86 @51337 has 180 MA's), (188, 51676), (207, 51754), (223, 51862), (232, 51964),

Gene: Breeniome\_100 Start: 49919, Stop: 50551, Start Num: 86

Candidate Starts for Breeniome\_100:

(Start: 45 @49832 has 5 MA's), (Start: 86 @49919 has 180 MA's), (188, 50258), (207, 50336), (223, 50444), (232, 50546),

Gene: Brilliant\_47 Start: 39981, Stop: 39427, Start Num: 87

Candidate Starts for Brilliant\_47:

(Start: 51 @40065 has 62 MA's), (Start: 53 @40059 has 3 MA's), (Start: 54 @40056 has 1 MA's), (Start: 87 @39981 has 221 MA's), (Start: 113 @39918 has 1 MA's), (115, 39915), (117, 39912), (138, 39858), (195, 39645), (214, 39579), (228, 39438),

Gene: BrownCNA\_44 Start: 40717, Stop: 39959, Start Num: 29

Candidate Starts for BrownCNA\_44:

(Start: 29 @40717 has 26 MA's), (41, 40648), (Start: 86 @40540 has 180 MA's), (97, 40510), (115, 40462), (120, 40450), (173, 40294), (177, 40279), (182, 40246), (195, 40177), (210, 40132), (217, 40093), (227, 39985),

Gene: Brownie5\_46 Start: 40828, Stop: 40058, Start Num: 22

Candidate Starts for Brownie5\_46:

(Start: 22 @40828 has 46 MA's), (48, 40735), (78, 40678), (79, 40669), (80, 40666), (84, 40657), (108, 40570), (Start: 113 @40555 has 1 MA's), (145, 40471), (177, 40378), (186, 40327), (195, 40276), (208, 40237),

Gene: Buckeye\_47 Start: 40302, Stop: 39742, Start Num: 87

Candidate Starts for Buckeye\_47:

(Start: 51 @40386 has 62 MA's), (Start: 53 @40380 has 3 MA's), (Start: 54 @40377 has 1 MA's), (Start: 87 @40302 has 221 MA's), (Start: 113 @40233 has 1 MA's), (115, 40230), (117, 40227), (138, 40173), (177, 40062), (195, 39960), (228, 39753),

Gene: Burr\_46 Start: 39976, Stop: 39416, Start Num: 87

Candidate Starts for Burr\_46:

(Start: 51 @40060 has 62 MA's), (Start: 53 @40054 has 3 MA's), (Start: 54 @40051 has 1 MA's), (Start: 87 @39976 has 221 MA's), (Start: 113 @39907 has 1 MA's), (115, 39904), (117, 39901), (138, 39847), (195, 39634), (228, 39427),

Gene: Burrough\_101 Start: 51836, Stop: 52468, Start Num: 86

Candidate Starts for Burrough\_101:

(Start: 86 @51836 has 180 MA's), (188, 52175), (207, 52253), (223, 52361), (232, 52463),

Gene: Bxz1\_99 Start: 53274, Stop: 53906, Start Num: 86  
Candidate Starts for Bxz1\_99:  
(Start: 86 @53274 has 180 MA's), (188, 53613), (207, 53691), (223, 53799), (232, 53901),

Gene: CRB2\_48 Start: 42937, Stop: 42212, Start Num: 22  
Candidate Starts for CRB2\_48:  
(Start: 22 @42937 has 46 MA's), (92, 42748), (96, 42736), (119, 42685), (132, 42652), (150, 42601),  
(190, 42466), (195, 42430), (199, 42415), (208, 42391), (217, 42346), (224, 42292),

Gene: Cactojaque\_96 Start: 49910, Stop: 50542, Start Num: 86  
Candidate Starts for Cactojaque\_96:  
(Start: 86 @49910 has 180 MA's), (188, 50249), (207, 50327), (223, 50435), (232, 50537),

Gene: CaiB\_42 Start: 35854, Stop: 35279, Start Num: 83  
Candidate Starts for CaiB\_42:  
(Start: 83 @35854 has 11 MA's), (99, 35815), (140, 35704), (155, 35665), (184, 35542), (188, 35530),  
(190, 35521), (197, 35479), (199, 35476), (200, 35473), (203, 35464),

Gene: Calamitous\_46 Start: 40702, Stop: 39938, Start Num: 22  
Candidate Starts for Calamitous\_46:  
(Start: 22 @40702 has 46 MA's), (37, 40660), (48, 40615), (78, 40558), (79, 40549), (80, 40546), (84,  
40537), (108, 40450), (Start: 113 @40435 has 1 MA's), (145, 40351), (177, 40258), (186, 40207), (195,  
40156), (208, 40117),

Gene: Cali\_97 Start: 51838, Stop: 52470, Start Num: 86  
Candidate Starts for Cali\_97:  
(Start: 86 @51838 has 180 MA's), (188, 52177), (207, 52255), (223, 52363), (232, 52465),

Gene: CamL\_47 Start: 40271, Stop: 39717, Start Num: 87  
Candidate Starts for CamL\_47:  
(Start: 51 @40355 has 62 MA's), (Start: 53 @40349 has 3 MA's), (Start: 54 @40346 has 1 MA's),  
(Start: 87 @40271 has 221 MA's), (Start: 113 @40208 has 1 MA's), (115, 40205), (117, 40202), (138,  
40148), (195, 39935), (214, 39869), (228, 39728),

Gene: CampRoach\_48 Start: 40405, Stop: 39845, Start Num: 87  
Candidate Starts for CampRoach\_48:  
(Start: 51 @40489 has 62 MA's), (Start: 53 @40483 has 3 MA's), (Start: 54 @40480 has 1 MA's),  
(Start: 87 @40405 has 221 MA's), (Start: 113 @40336 has 1 MA's), (115, 40333), (117, 40330), (138,  
40276), (195, 40063),

Gene: Cane17\_90 Start: 49972, Stop: 50604, Start Num: 86  
Candidate Starts for Cane17\_90:  
(Start: 86 @49972 has 180 MA's), (188, 50311), (207, 50389), (223, 50497), (232, 50599),

Gene: Cannibal\_47 Start: 40254, Stop: 39700, Start Num: 87  
Candidate Starts for Cannibal\_47:  
(Start: 51 @40338 has 62 MA's), (Start: 53 @40332 has 3 MA's), (Start: 54 @40329 has 1 MA's),  
(Start: 87 @40254 has 221 MA's), (Start: 113 @40191 has 1 MA's), (115, 40188), (117, 40185), (138,  
40131), (195, 39918), (214, 39852), (228, 39711),

Gene: Capablanca\_103 Start: 52088, Stop: 52720, Start Num: 86  
Candidate Starts for Capablanca\_103:  
(40, 51977), (Start: 86 @52088 has 180 MA's), (188, 52427), (207, 52505), (223, 52613), (232, 52715),

Gene: Caravan\_96 Start: 51189, Stop: 51827, Start Num: 86

Candidate Starts for Caravan\_96:

(Start: 86 @51189 has 180 MA's), (188, 51534), (207, 51612), (223, 51720), (232, 51822),

Gene: Carthage\_45 Start: 39189, Stop: 38629, Start Num: 87

Candidate Starts for Carthage\_45:

(Start: 51 @39273 has 62 MA's), (Start: 53 @39267 has 3 MA's), (Start: 54 @39264 has 1 MA's),  
(Start: 61 @39246 has 2 MA's), (Start: 87 @39189 has 221 MA's), (Start: 113 @39120 has 1 MA's),  
(115, 39117), (117, 39114), (138, 39060), (177, 38949), (195, 38847), (228, 38640),

Gene: Caspiboi\_46 Start: 40064, Stop: 39426, Start Num: 51

Candidate Starts for Caspiboi\_46:

(Start: 51 @40064 has 62 MA's), (Start: 53 @40058 has 3 MA's), (Start: 54 @40055 has 1 MA's),  
(Start: 87 @39980 has 221 MA's), (Start: 113 @39917 has 1 MA's), (115, 39914), (117, 39911), (138,  
39857), (195, 39644), (214, 39578), (228, 39437),

Gene: Catera\_98 Start: 50105, Stop: 50743, Start Num: 86

Candidate Starts for Catera\_98:

(Start: 86 @50105 has 180 MA's), (188, 50450), (207, 50528), (223, 50636), (232, 50738),

Gene: Chaelin\_47 Start: 39977, Stop: 39417, Start Num: 87

Candidate Starts for Chaelin\_47:

(Start: 51 @40061 has 62 MA's), (Start: 53 @40055 has 3 MA's), (Start: 54 @40052 has 1 MA's),  
(Start: 87 @39977 has 221 MA's), (Start: 113 @39908 has 1 MA's), (115, 39905), (117, 39902), (138,  
39848), (195, 39635), (228, 39428),

Gene: Chah\_49 Start: 40516, Stop: 39872, Start Num: 51

Candidate Starts for Chah\_49:

(Start: 51 @40516 has 62 MA's), (Start: 53 @40510 has 3 MA's), (Start: 54 @40507 has 1 MA's),  
(Start: 87 @40432 has 221 MA's), (Start: 113 @40363 has 1 MA's), (115, 40360), (117, 40357), (138,  
40303), (195, 40090),

Gene: Chargie21\_98 Start: 50225, Stop: 50857, Start Num: 86

Candidate Starts for Chargie21\_98:

(Start: 86 @50225 has 180 MA's), (188, 50564), (207, 50642), (223, 50750), (232, 50852),

Gene: Charles1\_47 Start: 40262, Stop: 39702, Start Num: 87

Candidate Starts for Charles1\_47:

(Start: 51 @40346 has 62 MA's), (Start: 53 @40340 has 3 MA's), (Start: 54 @40337 has 1 MA's),  
(Start: 87 @40262 has 221 MA's), (Start: 113 @40193 has 1 MA's), (115, 40190), (117, 40187), (138,  
40133), (177, 40022), (195, 39920), (228, 39713),

Gene: CharlieB\_97 Start: 50240, Stop: 50872, Start Num: 86

Candidate Starts for CharlieB\_97:

(Start: 86 @50240 has 180 MA's), (188, 50579), (207, 50657), (223, 50765), (232, 50867),

Gene: CharlieGBrown\_46 Start: 39852, Stop: 39292, Start Num: 87

Candidate Starts for CharlieGBrown\_46:

(Start: 51 @39936 has 62 MA's), (Start: 53 @39930 has 3 MA's), (Start: 54 @39927 has 1 MA's),  
(Start: 87 @39852 has 221 MA's), (Start: 113 @39783 has 1 MA's), (115, 39780), (117, 39777), (138,  
39723), (195, 39510), (228, 39303),

Gene: CharlottesWeb\_40 Start: 33924, Stop: 33235, Start Num: 44  
Candidate Starts for CharlottesWeb\_40:  
(Start: 44 @33924 has 11 MA's), (97, 33780), (105, 33753), (127, 33675), (177, 33549), (195, 33447),  
(199, 33432), (213, 33384),

Gene: ChaylaJr\_96 Start: 49731, Stop: 50363, Start Num: 86  
Candidate Starts for ChaylaJr\_96:  
(Start: 86 @49731 has 180 MA's), (188, 50070), (207, 50148), (223, 50256), (232, 50358),

Gene: CheetO\_47 Start: 40366, Stop: 39722, Start Num: 51  
Candidate Starts for CheetO\_47:  
(Start: 51 @40366 has 62 MA's), (Start: 53 @40360 has 3 MA's), (Start: 54 @40357 has 1 MA's),  
(Start: 87 @40282 has 221 MA's), (Start: 113 @40213 has 1 MA's), (115, 40210), (117, 40207), (138,  
40153), (195, 39940), (228, 39733),

Gene: Cher\_46 Start: 39999, Stop: 39439, Start Num: 87  
Candidate Starts for Cher\_46:  
(Start: 51 @40083 has 62 MA's), (Start: 53 @40077 has 3 MA's), (Start: 54 @40074 has 1 MA's),  
(Start: 87 @39999 has 221 MA's), (Start: 113 @39930 has 1 MA's), (115, 39927), (117, 39924), (177,  
39759), (195, 39657), (214, 39591), (228, 39450),

Gene: CherryTomatoes\_54 Start: 17569, Stop: 18327, Start Num: 42  
Candidate Starts for CherryTomatoes\_54:  
(Start: 42 @17569 has 3 MA's), (149, 17890), (193, 18070), (205, 18118), (215, 18166),

Gene: ChickenPhender\_97 Start: 50034, Stop: 50666, Start Num: 86  
Candidate Starts for ChickenPhender\_97:  
(Start: 86 @50034 has 180 MA's), (188, 50373), (207, 50451), (223, 50559), (232, 50661),

Gene: Childish\_46 Start: 40002, Stop: 39442, Start Num: 87  
Candidate Starts for Childish\_46:  
(Start: 51 @40086 has 62 MA's), (Start: 53 @40080 has 3 MA's), (Start: 54 @40077 has 1 MA's),  
(Start: 87 @40002 has 221 MA's), (Start: 113 @39933 has 1 MA's), (115, 39930), (117, 39927), (138,  
39873), (195, 39660), (228, 39453),

Gene: Chipette\_48 Start: 40492, Stop: 39932, Start Num: 87  
Candidate Starts for Chipette\_48:  
(Start: 51 @40576 has 62 MA's), (Start: 53 @40570 has 3 MA's), (Start: 54 @40567 has 1 MA's),  
(Start: 87 @40492 has 221 MA's), (Start: 113 @40423 has 1 MA's), (115, 40420), (117, 40417), (138,  
40363), (195, 40150), (228, 39943),

Gene: Chomp\_100 Start: 51626, Stop: 52258, Start Num: 86  
Candidate Starts for Chomp\_100:  
(Start: 45 @51539 has 5 MA's), (Start: 86 @51626 has 180 MA's), (188, 51965), (207, 52043), (223,  
52151), (232, 52253),

Gene: Chorkpop\_47 Start: 39998, Stop: 39438, Start Num: 87  
Candidate Starts for Chorkpop\_47:  
(Start: 51 @40082 has 62 MA's), (Start: 53 @40076 has 3 MA's), (Start: 54 @40073 has 1 MA's),  
(Start: 87 @39998 has 221 MA's), (Start: 113 @39929 has 1 MA's), (115, 39926), (117, 39923), (177,  
39758), (195, 39656), (228, 39449),

Gene: ChrisnMich\_42 Start: 39396, Stop: 38659, Start Num: 29

Candidate Starts for ChrisnMich\_42:

(19, 39450), (Start: 29 @39396 has 26 MA's), (58, 39282), (76, 39252), (80, 39234), (102, 39180), (115, 39141), (160, 39021), (175, 38985), (177, 38979), (182, 38946), (195, 38877), (210, 38832),

Gene: Chuni\_46 Start: 40296, Stop: 39736, Start Num: 87

Candidate Starts for Chuni\_46:

(Start: 51 @40380 has 62 MA's), (Start: 53 @40374 has 3 MA's), (Start: 54 @40371 has 1 MA's), (Start: 87 @40296 has 221 MA's), (Start: 113 @40227 has 1 MA's), (115, 40224), (117, 40221), (138, 40167), (195, 39954), (228, 39747),

Gene: Chunky\_47 Start: 40285, Stop: 39725, Start Num: 87

Candidate Starts for Chunky\_47:

(Start: 51 @40369 has 62 MA's), (Start: 53 @40363 has 3 MA's), (Start: 54 @40360 has 1 MA's), (Start: 87 @40285 has 221 MA's), (Start: 113 @40216 has 1 MA's), (115, 40213), (117, 40210), (138, 40156), (177, 40045), (195, 39943), (228, 39736),

Gene: Chute\_46 Start: 40410, Stop: 39766, Start Num: 51

Candidate Starts for Chute\_46:

(Start: 51 @40410 has 62 MA's), (Start: 53 @40404 has 3 MA's), (Start: 54 @40401 has 1 MA's), (Start: 87 @40326 has 221 MA's), (Start: 113 @40257 has 1 MA's), (115, 40254), (117, 40251), (138, 40197), (195, 39984), (228, 39777),

Gene: CindyLou\_102 Start: 51667, Stop: 52299, Start Num: 86

Candidate Starts for CindyLou\_102:

(Start: 45 @51580 has 5 MA's), (Start: 86 @51667 has 180 MA's), (188, 52006), (207, 52084), (223, 52192), (232, 52294),

Gene: Cleatunium\_95 Start: 50324, Stop: 50956, Start Num: 86

Candidate Starts for Cleatunium\_95:

(Start: 45 @50237 has 5 MA's), (Start: 86 @50324 has 180 MA's), (188, 50663), (207, 50741), (223, 50849), (232, 50951),

Gene: CloverMinnie\_42 Start: 35794, Stop: 35219, Start Num: 83

Candidate Starts for CloverMinnie\_42:

(Start: 83 @35794 has 11 MA's), (99, 35755), (140, 35644), (155, 35605), (184, 35482), (188, 35470), (190, 35461), (197, 35419), (199, 35416), (200, 35413),

Gene: Cobra\_47 Start: 40283, Stop: 39723, Start Num: 87

Candidate Starts for Cobra\_47:

(Start: 51 @40367 has 62 MA's), (Start: 53 @40361 has 3 MA's), (Start: 54 @40358 has 1 MA's), (Start: 87 @40283 has 221 MA's), (Start: 113 @40214 has 1 MA's), (115, 40211), (117, 40208), (177, 40043), (195, 39941), (228, 39734),

Gene: Coffee\_46 Start: 40805, Stop: 40041, Start Num: 22

Candidate Starts for Coffee\_46:

(Start: 22 @40805 has 46 MA's), (48, 40718), (78, 40661), (79, 40652), (80, 40649), (84, 40640), (108, 40553), (Start: 113 @40538 has 1 MA's), (145, 40454), (177, 40361), (186, 40310), (195, 40259), (208, 40220),

Gene: Colbert\_47 Start: 40422, Stop: 39778, Start Num: 51

Candidate Starts for Colbert\_47:

(Start: 51 @40422 has 62 MA's), (Start: 53 @40416 has 3 MA's), (Start: 54 @40413 has 1 MA's), (Start: 87 @40338 has 221 MA's), (Start: 113 @40269 has 1 MA's), (115, 40266), (117, 40263), (138,

40209), (195, 39996), (228, 39789),

Gene: Coldpizza\_43 Start: 38676, Stop: 38062, Start Num: 83

Candidate Starts for Coldpizza\_43:

(Start: 83 @38676 has 11 MA's), (143, 38496), (151, 38463), (225, 38121),

Gene: Coletti\_47 Start: 40410, Stop: 39766, Start Num: 51

Candidate Starts for Coletti\_47:

(Start: 51 @40410 has 62 MA's), (Start: 53 @40404 has 3 MA's), (Start: 54 @40401 has 1 MA's),  
(Start: 87 @40326 has 221 MA's), (Start: 113 @40257 has 1 MA's), (115, 40254), (117, 40251), (138,  
40197), (195, 39984), (228, 39777),

Gene: Colt\_91 Start: 50568, Stop: 51200, Start Num: 86

Candidate Starts for Colt\_91:

(Start: 86 @50568 has 180 MA's), (188, 50907), (207, 50985), (223, 51093), (232, 51195),

Gene: Comrade\_252 Start: 123254, Stop: 123727, Start Num: 124

Candidate Starts for Comrade\_252:

(118, 123236), (Start: 124 @123254 has 6 MA's), (170, 123380), (172, 123383), (179, 123416), (194,  
123491), (201, 123527), (202, 123530), (215, 123584), (218, 123602), (225, 123668), (227, 123707),

Gene: Concombres\_108 Start: 54002, Stop: 54640, Start Num: 86

Candidate Starts for Concombres\_108:

(Start: 70 @53966 has 3 MA's), (Start: 86 @54002 has 180 MA's), (188, 54347), (207, 54425), (223,  
54533), (232, 54635),

Gene: Cooper\_43 Start: 39615, Stop: 38878, Start Num: 29

Candidate Starts for Cooper\_43:

(19, 39669), (Start: 29 @39615 has 26 MA's), (58, 39501), (76, 39471), (80, 39453), (102, 39399),  
(115, 39360), (160, 39240), (175, 39204), (177, 39198), (182, 39165), (195, 39096), (210, 39051),

Gene: Cornbread\_46 Start: 39999, Stop: 39439, Start Num: 87

Candidate Starts for Cornbread\_46:

(Start: 51 @40083 has 62 MA's), (Start: 53 @40077 has 3 MA's), (Start: 54 @40074 has 1 MA's),  
(Start: 87 @39999 has 221 MA's), (Start: 113 @39930 has 1 MA's), (115, 39927), (117, 39924), (177,  
39759), (195, 39657), (228, 39450),

Gene: Cornobble\_46 Start: 39840, Stop: 39280, Start Num: 87

Candidate Starts for Cornobble\_46:

(Start: 51 @39924 has 62 MA's), (Start: 53 @39918 has 3 MA's), (Start: 54 @39915 has 1 MA's),  
(Start: 87 @39840 has 221 MA's), (Start: 113 @39771 has 1 MA's), (115, 39768), (117, 39765), (138,  
39711), (195, 39498), (228, 39291),

Gene: Cosmolli16\_46 Start: 39990, Stop: 39430, Start Num: 87

Candidate Starts for Cosmolli16\_46:

(Start: 51 @40074 has 62 MA's), (Start: 53 @40068 has 3 MA's), (Start: 54 @40065 has 1 MA's),  
(Start: 87 @39990 has 221 MA's), (Start: 113 @39921 has 1 MA's), (115, 39918), (117, 39915), (177,  
39750), (195, 39648), (228, 39441),

Gene: Craff\_48 Start: 40418, Stop: 39858, Start Num: 87

Candidate Starts for Craff\_48:

(Start: 51 @40502 has 62 MA's), (Start: 53 @40496 has 3 MA's), (Start: 54 @40493 has 1 MA's),  
(Start: 87 @40418 has 221 MA's), (Start: 113 @40349 has 1 MA's), (115, 40346), (117, 40343), (138,

40289), (195, 40076),

Gene: Crownjwl\_47 Start: 40059, Stop: 39499, Start Num: 87

Candidate Starts for Crownjwl\_47:

(Start: 51 @40143 has 62 MA's), (Start: 53 @40137 has 3 MA's), (Start: 54 @40134 has 1 MA's),  
(Start: 87 @40059 has 221 MA's), (Start: 113 @39990 has 1 MA's), (115, 39987), (117, 39984), (138,  
39930), (195, 39717), (228, 39510),

Gene: DTDevon\_102 Start: 52106, Stop: 52744, Start Num: 86

Candidate Starts for DTDevon\_102:

(Start: 86 @52106 has 180 MA's), (188, 52451), (207, 52529), (223, 52637), (232, 52739),

Gene: DaddyDaniels\_47 Start: 39971, Stop: 39411, Start Num: 87

Candidate Starts for DaddyDaniels\_47:

(Start: 51 @40055 has 62 MA's), (Start: 53 @40049 has 3 MA's), (Start: 54 @40046 has 1 MA's),  
(Start: 87 @39971 has 221 MA's), (Start: 113 @39902 has 1 MA's), (115, 39899), (117, 39896), (138,  
39842), (195, 39629), (228, 39422),

Gene: Daffodil\_106 Start: 51803, Stop: 52441, Start Num: 86

Candidate Starts for Daffodil\_106:

(Start: 86 @51803 has 180 MA's), (188, 52148), (207, 52226), (223, 52334), (232, 52436),

Gene: Daffy\_47 Start: 39996, Stop: 39442, Start Num: 87

Candidate Starts for Daffy\_47:

(Start: 51 @40080 has 62 MA's), (Start: 53 @40074 has 3 MA's), (Start: 54 @40071 has 1 MA's),  
(Start: 87 @39996 has 221 MA's), (Start: 113 @39933 has 1 MA's), (115, 39930), (117, 39927), (138,  
39873), (195, 39660), (214, 39594), (228, 39453),

Gene: Daka\_48 Start: 40275, Stop: 39715, Start Num: 87

Candidate Starts for Daka\_48:

(Start: 51 @40359 has 62 MA's), (Start: 53 @40353 has 3 MA's), (Start: 54 @40350 has 1 MA's),  
(Start: 87 @40275 has 221 MA's), (Start: 113 @40206 has 1 MA's), (115, 40203), (117, 40200), (138,  
40146), (195, 39933), (228, 39726),

Gene: DalanDe\_65 Start: 59026, Stop: 59634, Start Num: 89

Candidate Starts for DalanDe\_65:

(72, 58969), (Start: 89 @59026 has 1 MA's), (147, 59206), (156, 59233), (160, 59251), (170, 59287),  
(174, 59299), (177, 59308), (191, 59386), (223, 59554),

Gene: Dandelion\_108 Start: 54240, Stop: 54878, Start Num: 86

Candidate Starts for Dandelion\_108:

(Start: 86 @54240 has 180 MA's), (188, 54585), (207, 54663), (223, 54771), (232, 54873),

Gene: Darko\_101 Start: 51745, Stop: 52377, Start Num: 86

Candidate Starts for Darko\_101:

(Start: 86 @51745 has 180 MA's), (188, 52084), (207, 52162), (223, 52270), (232, 52372),

Gene: Dati\_47 Start: 39999, Stop: 39439, Start Num: 87

Candidate Starts for Dati\_47:

(Start: 51 @40083 has 62 MA's), (Start: 53 @40077 has 3 MA's), (Start: 54 @40074 has 1 MA's),  
(Start: 87 @39999 has 221 MA's), (Start: 113 @39930 has 1 MA's), (115, 39927), (117, 39924), (138,  
39870), (177, 39759), (195, 39657), (228, 39450),

Gene: DeejaClivia\_90 Start: 48422, Stop: 49054, Start Num: 86

Candidate Starts for DeejaClivia\_90:

(Start: 86 @48422 has 180 MA's), (188, 48761), (207, 48839), (223, 48947), (232, 49049),

Gene: DelRivs\_46 Start: 40003, Stop: 39443, Start Num: 87

Candidate Starts for DelRivs\_46:

(Start: 51 @40087 has 62 MA's), (Start: 53 @40081 has 3 MA's), (Start: 54 @40078 has 1 MA's),  
(Start: 87 @40003 has 221 MA's), (Start: 113 @39934 has 1 MA's), (115, 39931), (117, 39928), (177,  
39763), (195, 39661), (228, 39454),

Gene: Delilah\_101 Start: 51957, Stop: 52595, Start Num: 86

Candidate Starts for Delilah\_101:

(Start: 86 @51957 has 180 MA's), (188, 52302), (207, 52380), (223, 52488), (232, 52590),

Gene: Delylah\_104 Start: 51502, Stop: 52134, Start Num: 86

Candidate Starts for Delylah\_104:

(40, 51391), (Start: 86 @51502 has 180 MA's), (188, 51841), (207, 51919), (223, 52027), (232, 52129),

Gene: Demodog\_108 Start: 54002, Stop: 54640, Start Num: 86

Candidate Starts for Demodog\_108:

(Start: 70 @53966 has 3 MA's), (Start: 86 @54002 has 180 MA's), (188, 54347), (207, 54425), (223,  
54533), (232, 54635),

Gene: Derek\_101 Start: 51428, Stop: 52060, Start Num: 86

Candidate Starts for Derek\_101:

(Start: 45 @51341 has 5 MA's), (Start: 86 @51428 has 180 MA's), (188, 51767), (207, 51845), (223,  
51953), (232, 52055),

Gene: Derpp\_46 Start: 39841, Stop: 39281, Start Num: 87

Candidate Starts for Derpp\_46:

(Start: 51 @39925 has 62 MA's), (Start: 53 @39919 has 3 MA's), (Start: 54 @39916 has 1 MA's),  
(Start: 87 @39841 has 221 MA's), (Start: 113 @39772 has 1 MA's), (115, 39769), (117, 39766), (177,  
39601), (195, 39499), (228, 39292),

Gene: Dessert\_98 Start: 49904, Stop: 50536, Start Num: 86

Candidate Starts for Dessert\_98:

(Start: 45 @49817 has 5 MA's), (Start: 86 @49904 has 180 MA's), (188, 50243), (207, 50321), (223,  
50429), (232, 50531),

Gene: Dice\_46 Start: 39967, Stop: 39413, Start Num: 87

Candidate Starts for Dice\_46:

(Start: 51 @40051 has 62 MA's), (Start: 53 @40045 has 3 MA's), (Start: 54 @40042 has 1 MA's),  
(Start: 87 @39967 has 221 MA's), (Start: 113 @39904 has 1 MA's), (115, 39901), (117, 39898), (138,  
39844), (195, 39631), (214, 39565), (228, 39424),

Gene: Dietrick\_93 Start: 49504, Stop: 50136, Start Num: 86

Candidate Starts for Dietrick\_93:

(Start: 86 @49504 has 180 MA's), (188, 49843), (207, 49921), (223, 50029), (232, 50131),

Gene: DigitDog\_45 Start: 40602, Stop: 39817, Start Num: 26

Candidate Starts for DigitDog\_45:

(4, 40782), (5, 40770), (6, 40764), (10, 40713), (Start: 26 @40602 has 8 MA's), (79, 40440), (Start: 88  
@40413 has 2 MA's), (119, 40314), (145, 40239), (177, 40137), (195, 40035), (196, 40029), (199,

40020), (213, 39972),

Gene: Dingo\_47 Start: 40265, Stop: 39705, Start Num: 87

Candidate Starts for Dingo\_47:

(Start: 74 @40307 has 3 MA's), (Start: 87 @40265 has 221 MA's), (Start: 113 @40196 has 1 MA's), (115, 40193), (117, 40190), (138, 40136), (195, 39923), (228, 39716),

Gene: Dione\_46 Start: 39975, Stop: 39421, Start Num: 87

Candidate Starts for Dione\_46:

(Start: 51 @40059 has 62 MA's), (Start: 53 @40053 has 3 MA's), (Start: 54 @40050 has 1 MA's), (Start: 87 @39975 has 221 MA's), (Start: 113 @39912 has 1 MA's), (115, 39909), (117, 39906), (138, 39852), (195, 39639), (214, 39573), (228, 39432),

Gene: DirtJuice\_47 Start: 40265, Stop: 39705, Start Num: 87

Candidate Starts for DirtJuice\_47:

(Start: 51 @40349 has 62 MA's), (Start: 53 @40343 has 3 MA's), (Start: 54 @40340 has 1 MA's), (Start: 87 @40265 has 221 MA's), (Start: 113 @40196 has 1 MA's), (115, 40193), (117, 40190), (138, 40136), (177, 40025), (195, 39923), (228, 39716),

Gene: DirtMonster\_95 Start: 50996, Stop: 51628, Start Num: 86

Candidate Starts for DirtMonster\_95:

(Start: 86 @50996 has 180 MA's), (188, 51335), (207, 51413), (223, 51521), (232, 51623),

Gene: Doddsville\_47 Start: 39995, Stop: 39435, Start Num: 87

Candidate Starts for Doddsville\_47:

(Start: 51 @40079 has 62 MA's), (Start: 53 @40073 has 3 MA's), (Start: 54 @40070 has 1 MA's), (Start: 87 @39995 has 221 MA's), (Start: 113 @39926 has 1 MA's), (115, 39923), (117, 39920), (138, 39866), (195, 39653), (228, 39446),

Gene: DoesntMatter\_46 Start: 40352, Stop: 39708, Start Num: 51

Candidate Starts for DoesntMatter\_46:

(Start: 51 @40352 has 62 MA's), (Start: 53 @40346 has 3 MA's), (Start: 54 @40343 has 1 MA's), (Start: 87 @40268 has 221 MA's), (Start: 113 @40199 has 1 MA's), (115, 40196), (117, 40193), (138, 40139), (177, 40028), (195, 39926), (228, 39719),

Gene: DolOn\_50 Start: 40643, Stop: 40083, Start Num: 87

Candidate Starts for DolOn\_50:

(Start: 51 @40727 has 62 MA's), (Start: 53 @40721 has 3 MA's), (Start: 54 @40718 has 1 MA's), (Start: 87 @40643 has 221 MA's), (Start: 113 @40574 has 1 MA's), (115, 40571), (117, 40568), (138, 40514), (195, 40301),

Gene: Domi\_95 Start: 50853, Stop: 51485, Start Num: 86

Candidate Starts for Domi\_95:

(Start: 86 @50853 has 180 MA's), (188, 51192), (207, 51270), (223, 51378), (232, 51480),

Gene: DonSanchon\_46 Start: 39978, Stop: 39418, Start Num: 87

Candidate Starts for DonSanchon\_46:

(Start: 51 @40062 has 62 MA's), (Start: 53 @40056 has 3 MA's), (Start: 54 @40053 has 1 MA's), (Start: 87 @39978 has 221 MA's), (Start: 113 @39909 has 1 MA's), (115, 39906), (117, 39903), (177, 39738), (195, 39636), (228, 39429),

Gene: Donny\_46 Start: 40907, Stop: 40122, Start Num: 26

Candidate Starts for Donny\_46:

(Start: 26 @40907 has 8 MA's), (48, 40820), (79, 40745), (Start: 88 @40718 has 2 MA's), (119, 40619), (195, 40340), (199, 40325),

Gene: DrPhinkDaddy\_100 Start: 52023, Stop: 52661, Start Num: 86

Candidate Starts for DrPhinkDaddy\_100:

(Start: 86 @52023 has 180 MA's), (188, 52368), (207, 52446), (223, 52554), (232, 52656),

Gene: Drazdys\_100 Start: 50726, Stop: 51358, Start Num: 86

Candidate Starts for Drazdys\_100:

(Start: 45 @50639 has 5 MA's), (Start: 86 @50726 has 180 MA's), (188, 51065), (207, 51143), (223, 51251), (232, 51353),

Gene: DuchessDung\_46 Start: 39267, Stop: 38707, Start Num: 87

Candidate Starts for DuchessDung\_46:

(Start: 51 @39351 has 62 MA's), (Start: 53 @39345 has 3 MA's), (Start: 54 @39342 has 1 MA's), (Start: 87 @39267 has 221 MA's), (Start: 113 @39198 has 1 MA's), (115, 39195), (117, 39192), (195, 38925),

Gene: Duckfeet\_94 Start: 49953, Stop: 50585, Start Num: 86

Candidate Starts for Duckfeet\_94:

(Start: 86 @49953 has 180 MA's), (188, 50292), (207, 50370), (223, 50478), (232, 50580),

Gene: Duggie\_46 Start: 39997, Stop: 39437, Start Num: 87

Candidate Starts for Duggie\_46:

(Start: 51 @40081 has 62 MA's), (Start: 53 @40075 has 3 MA's), (Start: 54 @40072 has 1 MA's), (Start: 87 @39997 has 221 MA's), (Start: 113 @39928 has 1 MA's), (115, 39925), (117, 39922), (138, 39868), (195, 39655), (228, 39448),

Gene: Durga\_48 Start: 40433, Stop: 39873, Start Num: 87

Candidate Starts for Durga\_48:

(Start: 51 @40517 has 62 MA's), (Start: 53 @40511 has 3 MA's), (Start: 54 @40508 has 1 MA's), (Start: 87 @40433 has 221 MA's), (Start: 113 @40364 has 1 MA's), (115, 40361), (117, 40358), (138, 40304), (195, 40091),

Gene: ET08\_90 Start: 50495, Stop: 51127, Start Num: 86

Candidate Starts for ET08\_90:

(Start: 86 @50495 has 180 MA's), (188, 50834), (207, 50912), (223, 51020), (232, 51122),

Gene: Eaglehorse\_46 Start: 40729, Stop: 39965, Start Num: 22

Candidate Starts for Eaglehorse\_46:

(Start: 22 @40729 has 46 MA's), (48, 40642), (78, 40585), (79, 40576), (80, 40573), (84, 40564), (108, 40477), (Start: 113 @40462 has 1 MA's), (145, 40378), (177, 40285), (186, 40234), (195, 40183), (208, 40144),

Gene: EastView9101\_44 Start: 40557, Stop: 39772, Start Num: 26

Candidate Starts for EastView9101\_44:

(Start: 26 @40557 has 8 MA's), (48, 40470), (79, 40395), (Start: 88 @40368 has 2 MA's), (119, 40269), (195, 39990), (199, 39975),

Gene: EasyJones\_104 Start: 50888, Stop: 51520, Start Num: 86

Candidate Starts for EasyJones\_104:

(Start: 86 @50888 has 180 MA's), (188, 51227), (207, 51305), (223, 51413), (232, 51515),

Gene: EggyFarm\_109 Start: 53767, Stop: 54399, Start Num: 86  
Candidate Starts for EggyFarm\_109:  
(Start: 86 @53767 has 180 MA's), (188, 54106), (207, 54184), (223, 54292), (232, 54394),

Gene: ElvisPhasley\_48 Start: 40455, Stop: 39895, Start Num: 87  
Candidate Starts for ElvisPhasley\_48:  
(Start: 51 @40539 has 62 MA's), (Start: 53 @40533 has 3 MA's), (Start: 54 @40530 has 1 MA's),  
(Start: 87 @40455 has 221 MA's), (Start: 113 @40386 has 1 MA's), (115, 40383), (117, 40380), (138,  
40326), (195, 40113),

Gene: EmToTheThree\_104 Start: 53020, Stop: 53658, Start Num: 86  
Candidate Starts for EmToTheThree\_104:  
(Start: 86 @53020 has 180 MA's), (188, 53365), (207, 53443), (223, 53551), (232, 53653),

Gene: Emiris\_48 Start: 40401, Stop: 39841, Start Num: 87  
Candidate Starts for Emiris\_48:  
(Start: 51 @40485 has 62 MA's), (Start: 53 @40479 has 3 MA's), (Start: 54 @40476 has 1 MA's),  
(Start: 87 @40401 has 221 MA's), (Start: 113 @40332 has 1 MA's), (115, 40329), (117, 40326), (138,  
40272), (195, 40059),

Gene: EmmaElysia\_101 Start: 50554, Stop: 51186, Start Num: 86  
Candidate Starts for EmmaElysia\_101:  
(Start: 86 @50554 has 180 MA's), (188, 50893), (207, 50971), (223, 51079), (232, 51181),

Gene: EmpTee\_47 Start: 40281, Stop: 39721, Start Num: 87  
Candidate Starts for EmpTee\_47:  
(Start: 51 @40365 has 62 MA's), (Start: 53 @40359 has 3 MA's), (Start: 54 @40356 has 1 MA's),  
(Start: 87 @40281 has 221 MA's), (Start: 113 @40212 has 1 MA's), (115, 40209), (117, 40206), (138,  
40152), (195, 39939), (228, 39732),

Gene: Epah\_41 Start: 39395, Stop: 38667, Start Num: 29  
Candidate Starts for Epah\_41:  
(Start: 29 @39395 has 26 MA's), (78, 39254), (84, 39233), (Start: 88 @39218 has 2 MA's), (126,  
39113), (175, 38993), (177, 38987), (195, 38885), (210, 38840),

Gene: Erdmann\_102 Start: 51804, Stop: 52442, Start Num: 86  
Candidate Starts for Erdmann\_102:  
(Start: 86 @51804 has 180 MA's), (188, 52149), (207, 52227), (223, 52335), (232, 52437),

Gene: Eremos\_47 Start: 40274, Stop: 39714, Start Num: 87  
Candidate Starts for Eremos\_47:  
(Start: 51 @40358 has 62 MA's), (Start: 53 @40352 has 3 MA's), (Start: 54 @40349 has 1 MA's),  
(Start: 87 @40274 has 221 MA's), (Start: 113 @40205 has 1 MA's), (115, 40202), (117, 40199), (138,  
40145), (195, 39932), (228, 39725),

Gene: ErnieJ\_97 Start: 50014, Stop: 50652, Start Num: 86  
Candidate Starts for ErnieJ\_97:  
(Start: 86 @50014 has 180 MA's), (188, 50359), (207, 50437), (223, 50545), (232, 50647),

Gene: Essence\_98 Start: 50892, Stop: 51524, Start Num: 86  
Candidate Starts for Essence\_98:  
(Start: 45 @50805 has 5 MA's), (Start: 86 @50892 has 180 MA's), (188, 51231), (207, 51309), (223,  
51417), (232, 51519),

Gene: Etaye\_47 Start: 40268, Stop: 39708, Start Num: 87

Candidate Starts for Etaye\_47:

(Start: 51 @40352 has 62 MA's), (Start: 53 @40346 has 3 MA's), (Start: 54 @40343 has 1 MA's),  
(Start: 87 @40268 has 221 MA's), (Start: 113 @40199 has 1 MA's), (115, 40196), (117, 40193), (138,  
40139), (177, 40028), (195, 39926), (228, 39719),

Gene: Eugenia\_47 Start: 40278, Stop: 39724, Start Num: 87

Candidate Starts for Eugenia\_47:

(Start: 51 @40362 has 62 MA's), (Start: 53 @40356 has 3 MA's), (Start: 54 @40353 has 1 MA's),  
(Start: 87 @40278 has 221 MA's), (Start: 113 @40215 has 1 MA's), (115, 40212), (117, 40209), (138,  
40155), (195, 39942), (214, 39876), (228, 39735),

Gene: Evaa\_40 Start: 34989, Stop: 34357, Start Num: 83

Candidate Starts for Evaa\_40:

(66, 35028), (68, 35025), (Start: 83 @34989 has 11 MA's), (107, 34905), (134, 34824), (146, 34788),  
(161, 34737), (223, 34434),

Gene: Ewok\_102 Start: 51197, Stop: 51829, Start Num: 86

Candidate Starts for Ewok\_102:

(Start: 86 @51197 has 180 MA's), (188, 51536), (207, 51614), (223, 51722), (232, 51824),

Gene: Fanaw\_41 Start: 40092, Stop: 39364, Start Num: 29

Candidate Starts for Fanaw\_41:

(Start: 29 @40092 has 26 MA's), (Start: 86 @39924 has 180 MA's), (97, 39894), (115, 39846), (120,  
39834), (175, 39690), (177, 39684), (195, 39582), (210, 39537), (217, 39498), (227, 39390),

Gene: Fang\_48 Start: 40510, Stop: 39866, Start Num: 51

Candidate Starts for Fang\_48:

(Start: 51 @40510 has 62 MA's), (Start: 53 @40504 has 3 MA's), (Start: 54 @40501 has 1 MA's),  
(Start: 87 @40426 has 221 MA's), (Start: 113 @40357 has 1 MA's), (115, 40354), (117, 40351), (138,  
40297), (195, 40084),

Gene: Faze9\_45 Start: 40825, Stop: 40061, Start Num: 22

Candidate Starts for Faze9\_45:

(Start: 22 @40825 has 46 MA's), (37, 40783), (48, 40738), (78, 40681), (79, 40672), (80, 40669), (84,  
40660), (108, 40573), (Start: 113 @40558 has 1 MA's), (145, 40474), (177, 40381), (186, 40330), (195,  
40279), (208, 40240),

Gene: FelixTres\_42 Start: 35857, Stop: 35282, Start Num: 83

Candidate Starts for FelixTres\_42:

(Start: 83 @35857 has 11 MA's), (99, 35818), (140, 35707), (155, 35668), (184, 35545), (188, 35533),  
(190, 35524), (197, 35482), (199, 35479), (200, 35476),

Gene: Fixie\_98 Start: 50450, Stop: 51082, Start Num: 86

Candidate Starts for Fixie\_98:

(Start: 86 @50450 has 180 MA's), (188, 50789), (207, 50867), (223, 50975), (232, 51077),

Gene: Flabslab\_95 Start: 48889, Stop: 49521, Start Num: 86

Candidate Starts for Flabslab\_95:

(Start: 45 @48802 has 5 MA's), (Start: 86 @48889 has 180 MA's), (188, 49228), (207, 49306), (223,  
49414), (232, 49516),

Gene: Flake\_47 Start: 40417, Stop: 39773, Start Num: 51

Candidate Starts for Flake\_47:

(Start: 51 @40417 has 62 MA's), (Start: 53 @40411 has 3 MA's), (Start: 54 @40408 has 1 MA's),  
(Start: 87 @40333 has 221 MA's), (Start: 113 @40264 has 1 MA's), (115, 40261), (117, 40258), (138,  
40204), (195, 39991), (228, 39784),

Gene: FleetyMac\_47 Start: 40370, Stop: 39726, Start Num: 51

Candidate Starts for FleetyMac\_47:

(Start: 51 @40370 has 62 MA's), (Start: 53 @40364 has 3 MA's), (Start: 54 @40361 has 1 MA's),  
(Start: 87 @40286 has 221 MA's), (Start: 113 @40217 has 1 MA's), (115, 40214), (117, 40211), (138,  
40157), (177, 40046), (195, 39944), (228, 39737),

Gene: Fludd\_102 Start: 50660, Stop: 51292, Start Num: 86

Candidate Starts for Fludd\_102:

(Start: 86 @50660 has 180 MA's), (188, 50999), (207, 51077), (223, 51185), (232, 51287),

Gene: FluffyNinja\_48 Start: 40503, Stop: 39859, Start Num: 51

Candidate Starts for FluffyNinja\_48:

(Start: 51 @40503 has 62 MA's), (Start: 53 @40497 has 3 MA's), (Start: 54 @40494 has 1 MA's),  
(Start: 87 @40419 has 221 MA's), (Start: 113 @40350 has 1 MA's), (115, 40347), (117, 40344), (138,  
40290), (195, 40077),

Gene: Fongie\_99 Start: 51410, Stop: 52042, Start Num: 86

Candidate Starts for Fongie\_99:

(Start: 86 @51410 has 180 MA's), (188, 51749), (207, 51827), (223, 51935), (232, 52037),

Gene: ForDig\_39 Start: 38242, Stop: 37472, Start Num: 22

Candidate Starts for ForDig\_39:

(Start: 22 @38242 has 46 MA's), (31, 38203), (80, 38083), (Start: 88 @38059 has 2 MA's), (109,  
37981), (176, 37795), (177, 37792), (180, 37771), (195, 37690), (199, 37675),

Gene: Fortunato\_43 Start: 40450, Stop: 39692, Start Num: 29

Candidate Starts for Fortunato\_43:

(Start: 29 @40450 has 26 MA's), (41, 40381), (Start: 86 @40273 has 180 MA's), (97, 40243), (115,  
40195), (120, 40183), (139, 40138), (173, 40027), (177, 40012), (195, 39910), (210, 39865), (217,  
39826), (227, 39718),

Gene: FoxtrotP1\_101 Start: 52974, Stop: 53612, Start Num: 86

Candidate Starts for FoxtrotP1\_101:

(Start: 86 @52974 has 180 MA's), (188, 53319), (207, 53397), (223, 53505), (232, 53607),

Gene: Fozzie\_46 Start: 40303, Stop: 39743, Start Num: 87

Candidate Starts for Fozzie\_46:

(Start: 51 @40387 has 62 MA's), (Start: 53 @40381 has 3 MA's), (Start: 54 @40378 has 1 MA's),  
(Start: 87 @40303 has 221 MA's), (Start: 113 @40234 has 1 MA's), (115, 40231), (117, 40228), (138,  
40174), (195, 39961), (228, 39754),

Gene: Frankicide\_47 Start: 40293, Stop: 39733, Start Num: 87

Candidate Starts for Frankicide\_47:

(Start: 51 @40377 has 62 MA's), (Start: 53 @40371 has 3 MA's), (Start: 54 @40368 has 1 MA's),  
(Start: 87 @40293 has 221 MA's), (Start: 113 @40224 has 1 MA's), (115, 40221), (117, 40218), (138,  
40164), (177, 40053), (195, 39951), (228, 39744),

Gene: FrayBell\_106 Start: 52378, Stop: 53010, Start Num: 86

Candidate Starts for FrayBell\_106:

(Start: 45 @52291 has 5 MA's), (Start: 86 @52378 has 180 MA's), (188, 52717), (207, 52795), (223, 52903), (232, 53005),

Gene: Frederick\_43 Start: 40432, Stop: 39698, Start Num: 29

Candidate Starts for Frederick\_43:

(Start: 29 @40432 has 26 MA's), (Start: 86 @40258 has 180 MA's), (97, 40228), (115, 40180), (120, 40168), (175, 40024), (177, 40018), (195, 39916), (210, 39871), (217, 39832), (227, 39724),

Gene: FremontTroll\_47 Start: 40041, Stop: 39481, Start Num: 87

Candidate Starts for FremontTroll\_47:

(Start: 51 @40125 has 62 MA's), (Start: 53 @40119 has 3 MA's), (Start: 54 @40116 has 1 MA's), (Start: 87 @40041 has 221 MA's), (Start: 113 @39972 has 1 MA's), (115, 39969), (117, 39966), (177, 39801), (195, 39699), (228, 39492),

Gene: FrenchFry\_46 Start: 40819, Stop: 40055, Start Num: 22

Candidate Starts for FrenchFry\_46:

(Start: 22 @40819 has 46 MA's), (48, 40732), (78, 40675), (79, 40666), (80, 40663), (84, 40654), (108, 40567), (Start: 113 @40552 has 1 MA's), (145, 40468), (177, 40375), (186, 40324), (195, 40273), (208, 40234),

Gene: Fresco\_40 Start: 34038, Stop: 33349, Start Num: 44

Candidate Starts for Fresco\_40:

(28, 34119), (39, 34071), (Start: 44 @34038 has 11 MA's), (99, 33888), (103, 33876), (105, 33867), (180, 33642), (195, 33561), (199, 33546), (213, 33498),

Gene: Freya\_46 Start: 39966, Stop: 39412, Start Num: 87

Candidate Starts for Freya\_46:

(Start: 51 @40050 has 62 MA's), (Start: 53 @40044 has 3 MA's), (Start: 54 @40041 has 1 MA's), (Start: 87 @39966 has 221 MA's), (Start: 113 @39903 has 1 MA's), (115, 39900), (117, 39897), (138, 39843), (195, 39630), (214, 39564), (228, 39423),

Gene: FriarPreacher\_46 Start: 40305, Stop: 39745, Start Num: 87

Candidate Starts for FriarPreacher\_46:

(Start: 51 @40389 has 62 MA's), (Start: 53 @40383 has 3 MA's), (Start: 54 @40380 has 1 MA's), (Start: 87 @40305 has 221 MA's), (Start: 113 @40236 has 1 MA's), (115, 40233), (117, 40230), (177, 40065), (195, 39963), (228, 39756),

Gene: Fringe\_48 Start: 40402, Stop: 39842, Start Num: 87

Candidate Starts for Fringe\_48:

(Start: 51 @40486 has 62 MA's), (Start: 53 @40480 has 3 MA's), (Start: 54 @40477 has 1 MA's), (Start: 87 @40402 has 221 MA's), (Start: 113 @40333 has 1 MA's), (115, 40330), (117, 40327), (138, 40273), (195, 40060),

Gene: Frizzle\_18 Start: 17372, Stop: 16779, Start Num: 86

Candidate Starts for Frizzle\_18:

(Start: 86 @17372 has 180 MA's), (104, 17324), (128, 17252), (190, 17027), (213, 16928), (215, 16916),

Gene: FudgeTart\_101 Start: 51094, Stop: 51726, Start Num: 86

Candidate Starts for FudgeTart\_101:

(Start: 86 @51094 has 180 MA's), (188, 51433), (207, 51511), (223, 51619), (232, 51721),

Gene: FugateOSU\_46 Start: 39980, Stop: 39420, Start Num: 87

Candidate Starts for FugateOSU\_46:

(Start: 51 @40064 has 62 MA's), (Start: 53 @40058 has 3 MA's), (Start: 54 @40055 has 1 MA's),  
(Start: 87 @39980 has 221 MA's), (Start: 113 @39911 has 1 MA's), (115, 39908), (117, 39905), (138,  
39851), (167, 39770), (195, 39638), (228, 39431),

Gene: Funsized\_49 Start: 43198, Stop: 42434, Start Num: 22

Candidate Starts for Funsized\_49:

(Start: 22 @43198 has 46 MA's), (78, 43051), (Start: 86 @43024 has 180 MA's), (Start: 88 @43015  
has 2 MA's), (101, 42967), (119, 42916), (153, 42823), (176, 42757), (177, 42754), (183, 42712), (195,  
42652), (200, 42634),

Gene: Gabriel\_102 Start: 50298, Stop: 50930, Start Num: 86

Candidate Starts for Gabriel\_102:

(Start: 45 @50211 has 5 MA's), (Start: 86 @50298 has 180 MA's), (188, 50637), (207, 50715), (223,  
50823), (232, 50925),

Gene: Gamgam\_101 Start: 50251, Stop: 50970, Start Num: 45

Candidate Starts for Gamgam\_101:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223,  
50863), (232, 50965),

Gene: Gareth\_46 Start: 39974, Stop: 39420, Start Num: 87

Candidate Starts for Gareth\_46:

(Start: 51 @40058 has 62 MA's), (Start: 53 @40052 has 3 MA's), (Start: 54 @40049 has 1 MA's),  
(Start: 87 @39974 has 221 MA's), (Start: 113 @39911 has 1 MA's), (115, 39908), (117, 39905), (138,  
39851), (195, 39638), (214, 39572), (228, 39431),

Gene: GeneCoco\_47 Start: 40289, Stop: 39729, Start Num: 87

Candidate Starts for GeneCoco\_47:

(Start: 51 @40373 has 62 MA's), (Start: 53 @40367 has 3 MA's), (Start: 54 @40364 has 1 MA's),  
(Start: 87 @40289 has 221 MA's), (Start: 113 @40220 has 1 MA's), (115, 40217), (117, 40214), (177,  
40049), (195, 39947), (228, 39740),

Gene: Ghobes\_19 Start: 17373, Stop: 16780, Start Num: 86

Candidate Starts for Ghobes\_19:

(Start: 86 @17373 has 180 MA's), (104, 17325), (128, 17253), (190, 17028), (213, 16929), (215,  
16917),

Gene: Ghost\_100 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for Ghost\_100:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223,  
50863), (232, 50965),

Gene: GinPorsche\_42 Start: 39395, Stop: 38667, Start Num: 29

Candidate Starts for GinPorsche\_42:

(Start: 29 @39395 has 26 MA's), (78, 39254), (84, 39233), (Start: 88 @39218 has 2 MA's), (126,  
39113), (175, 38993), (177, 38987), (195, 38885), (210, 38840),

Gene: Giraffe\_47 Start: 40067, Stop: 39423, Start Num: 51

Candidate Starts for Giraffe\_47:

(Start: 51 @40067 has 62 MA's), (Start: 53 @40061 has 3 MA's), (Start: 54 @40058 has 1 MA's),  
(Start: 87 @39983 has 221 MA's), (Start: 113 @39914 has 1 MA's), (115, 39911), (117, 39908), (177,  
39743), (195, 39641), (228, 39434),

Gene: Gizmo\_105 Start: 52954, Stop: 53592, Start Num: 86

Candidate Starts for Gizmo\_105:

(Start: 86 @52954 has 180 MA's), (188, 53299), (207, 53377), (223, 53485), (232, 53587),

Gene: Glass\_46 Start: 40819, Stop: 40055, Start Num: 22

Candidate Starts for Glass\_46:

(Start: 22 @40819 has 46 MA's), (48, 40732), (78, 40675), (79, 40666), (80, 40663), (84, 40654), (108,  
40567), (Start: 113 @40552 has 1 MA's), (145, 40468), (177, 40375), (186, 40324), (195, 40273), (208,  
40234),

Gene: GlutenPhree\_102 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for GlutenPhree\_102:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223,  
50863), (232, 50965),

Gene: Godines\_46 Start: 40761, Stop: 39997, Start Num: 22

Candidate Starts for Godines\_46:

(Start: 22 @40761 has 46 MA's), (37, 40719), (48, 40674), (78, 40617), (79, 40608), (80, 40605), (84,  
40596), (108, 40509), (Start: 113 @40494 has 1 MA's), (145, 40410), (177, 40317), (186, 40266), (195,  
40215), (208, 40176),

Gene: Gophee\_47 Start: 40272, Stop: 39712, Start Num: 87

Candidate Starts for Gophee\_47:

(Start: 51 @40356 has 62 MA's), (Start: 53 @40350 has 3 MA's), (Start: 54 @40347 has 1 MA's),  
(Start: 87 @40272 has 221 MA's), (Start: 113 @40203 has 1 MA's), (115, 40200), (117, 40197), (138,  
40143), (195, 39930), (228, 39723),

Gene: Grand2040\_46 Start: 39992, Stop: 39438, Start Num: 87

Candidate Starts for Grand2040\_46:

(Start: 51 @40076 has 62 MA's), (Start: 53 @40070 has 3 MA's), (Start: 54 @40067 has 1 MA's),  
(Start: 87 @39992 has 221 MA's), (Start: 113 @39929 has 1 MA's), (115, 39926), (117, 39923), (138,  
39869), (195, 39656), (214, 39590), (228, 39449),

Gene: Grasshills\_108 Start: 53767, Stop: 54399, Start Num: 86

Candidate Starts for Grasshills\_108:

(Start: 86 @53767 has 180 MA's), (188, 54106), (207, 54184), (223, 54292), (232, 54394),

Gene: Greely\_236 Start: 133749, Stop: 134378, Start Num: 88

Candidate Starts for Greely\_236:

(Start: 88 @133749 has 2 MA's), (103, 133797), (168, 134001), (179, 134046), (188, 134085), (192,  
134106), (193, 134112), (198, 134142), (205, 134160), (229, 134355), (230, 134358),

Gene: GreenChile\_47 Start: 40277, Stop: 39717, Start Num: 87

Candidate Starts for GreenChile\_47:

(Start: 51 @40361 has 62 MA's), (Start: 53 @40355 has 3 MA's), (Start: 54 @40352 has 1 MA's),  
(Start: 87 @40277 has 221 MA's), (Start: 113 @40208 has 1 MA's), (115, 40205), (117, 40202), (177,  
40037), (195, 39935), (228, 39728),

Gene: Grungle\_89 Start: 48153, Stop: 48785, Start Num: 86

Candidate Starts for Grungle\_89:

(Start: 86 @48153 has 180 MA's), (188, 48492), (207, 48570), (223, 48678), (232, 48780),

Gene: Gustav\_54 Start: 38579, Stop: 38097, Start Num: 121

Candidate Starts for Gustav\_54:

(Start: 121 @38579 has 1 MA's), (136, 38540), (178, 38393), (181, 38372), (199, 38291), (208, 38273), (216, 38228), (222, 38180),

Gene: Guwapp\_100 Start: 50463, Stop: 51095, Start Num: 86

Candidate Starts for Guwapp\_100:

(Start: 45 @50376 has 5 MA's), (Start: 86 @50463 has 180 MA's), (188, 50802), (207, 50880), (223, 50988), (232, 51090),

Gene: Gwennie1\_47 Start: 40338, Stop: 39784, Start Num: 87

Candidate Starts for Gwennie1\_47:

(Start: 51 @40422 has 62 MA's), (Start: 53 @40416 has 3 MA's), (Start: 54 @40413 has 1 MA's), (Start: 87 @40338 has 221 MA's), (Start: 113 @40275 has 1 MA's), (115, 40272), (117, 40269), (138, 40215), (195, 40002), (214, 39936), (228, 39795),

Gene: Gwilliam\_47 Start: 40278, Stop: 39718, Start Num: 87

Candidate Starts for Gwilliam\_47:

(Start: 51 @40362 has 62 MA's), (Start: 53 @40356 has 3 MA's), (Start: 54 @40353 has 1 MA's), (Start: 87 @40278 has 221 MA's), (Start: 113 @40209 has 1 MA's), (115, 40206), (117, 40203), (138, 40149), (195, 39936), (228, 39729),

Gene: Gyarad\_0047 Start: 40364, Stop: 39720, Start Num: 51

Candidate Starts for Gyarad\_0047:

(Start: 51 @40364 has 62 MA's), (Start: 53 @40358 has 3 MA's), (Start: 54 @40355 has 1 MA's), (Start: 87 @40280 has 221 MA's), (Start: 113 @40211 has 1 MA's), (115, 40208), (117, 40205), (138, 40151), (177, 40040), (195, 39938), (228, 39731),

Gene: HSavage\_47 Start: 40284, Stop: 39724, Start Num: 87

Candidate Starts for HSavage\_47:

(Start: 51 @40368 has 62 MA's), (Start: 53 @40362 has 3 MA's), (Start: 54 @40359 has 1 MA's), (Start: 87 @40284 has 221 MA's), (Start: 113 @40215 has 1 MA's), (115, 40212), (117, 40209), (138, 40155), (177, 40044), (195, 39942), (228, 39735),

Gene: Haimas\_47 Start: 40278, Stop: 39718, Start Num: 87

Candidate Starts for Haimas\_47:

(Start: 51 @40362 has 62 MA's), (Start: 53 @40356 has 3 MA's), (Start: 54 @40353 has 1 MA's), (Start: 87 @40278 has 221 MA's), (Start: 113 @40209 has 1 MA's), (115, 40206), (117, 40203), (138, 40149), (195, 39936), (228, 39729),

Gene: Haleema\_46 Start: 39992, Stop: 39438, Start Num: 87

Candidate Starts for Haleema\_46:

(Start: 51 @40076 has 62 MA's), (Start: 53 @40070 has 3 MA's), (Start: 54 @40067 has 1 MA's), (Start: 87 @39992 has 221 MA's), (Start: 113 @39929 has 1 MA's), (115, 39926), (117, 39923), (138, 39869), (195, 39656), (214, 39590), (228, 39449),

Gene: Halldule\_95 Start: 49179, Stop: 49811, Start Num: 86

Candidate Starts for Halldule\_95:

(52, 49101), (Start: 86 @49179 has 180 MA's), (188, 49518), (207, 49596), (223, 49704), (232, 49806),

Gene: Hally898\_41 Start: 39407, Stop: 38679, Start Num: 29

Candidate Starts for Hally898\_41:

(Start: 29 @39407 has 26 MA's), (78, 39266), (84, 39245), (Start: 88 @39230 has 2 MA's), (126, 39125), (175, 39005), (177, 38999), (195, 38897), (210, 38852),

Gene: Hamish\_47 Start: 40270, Stop: 39710, Start Num: 87

Candidate Starts for Hamish\_47:

(Start: 51 @40354 has 62 MA's), (Start: 53 @40348 has 3 MA's), (Start: 54 @40345 has 1 MA's), (Start: 87 @40270 has 221 MA's), (Start: 113 @40201 has 1 MA's), (115, 40198), (117, 40195), (138, 40141), (195, 39928), (228, 39721),

Gene: Hangman\_42 Start: 40448, Stop: 39690, Start Num: 29

Candidate Starts for Hangman\_42:

(Start: 29 @40448 has 26 MA's), (41, 40379), (Start: 86 @40271 has 180 MA's), (97, 40241), (115, 40193), (120, 40181), (173, 40025), (177, 40010), (182, 39977), (195, 39908), (210, 39863), (217, 39824), (227, 39716),

Gene: Happabalu\_47 Start: 40083, Stop: 39439, Start Num: 51

Candidate Starts for Happabalu\_47:

(Start: 51 @40083 has 62 MA's), (Start: 53 @40077 has 3 MA's), (Start: 54 @40074 has 1 MA's), (Start: 87 @39999 has 221 MA's), (Start: 113 @39930 has 1 MA's), (115, 39927), (117, 39924), (138, 39870), (177, 39759), (195, 39657), (228, 39450),

Gene: Hartsy\_47 Start: 40321, Stop: 39761, Start Num: 87

Candidate Starts for Hartsy\_47:

(Start: 51 @40405 has 62 MA's), (Start: 53 @40399 has 3 MA's), (Start: 54 @40396 has 1 MA's), (Start: 87 @40321 has 221 MA's), (Start: 113 @40252 has 1 MA's), (115, 40249), (117, 40246), (138, 40192), (195, 39979), (228, 39772),

Gene: Harvey\_47 Start: 40380, Stop: 39736, Start Num: 51

Candidate Starts for Harvey\_47:

(Start: 51 @40380 has 62 MA's), (Start: 53 @40374 has 3 MA's), (Start: 54 @40371 has 1 MA's), (Start: 87 @40296 has 221 MA's), (Start: 113 @40227 has 1 MA's), (115, 40224), (117, 40221), (177, 40056), (195, 39954), (228, 39747),

Gene: Hashim76\_48 Start: 39661, Stop: 38867, Start Num: 22

Candidate Starts for Hashim76\_48:

(Start: 17 @39691 has 1 MA's), (Start: 22 @39661 has 46 MA's), (34, 39613), (49, 39553), (78, 39490), (Start: 88 @39454 has 2 MA's), (94, 39430), (153, 39244), (177, 39187), (195, 39082), (208, 39043), (213, 39019),

Gene: Heath\_41 Start: 40055, Stop: 39297, Start Num: 29

Candidate Starts for Heath\_41:

(Start: 29 @40055 has 26 MA's), (41, 39986), (Start: 86 @39878 has 180 MA's), (97, 39848), (115, 39800), (120, 39788), (139, 39743), (173, 39632), (177, 39617), (182, 39584), (195, 39515), (210, 39470), (217, 39431), (227, 39323),

Gene: Hedgerow\_46 Start: 40801, Stop: 40037, Start Num: 22

Candidate Starts for Hedgerow\_46:

(Start: 22 @40801 has 46 MA's), (48, 40714), (78, 40657), (79, 40648), (80, 40645), (84, 40636), (108, 40549), (Start: 113 @40534 has 1 MA's), (145, 40450), (177, 40357), (186, 40306), (195, 40255), (208, 40216),

Gene: Hekos\_44 Start: 38847, Stop: 38287, Start Num: 87

Candidate Starts for Hekos\_44:

(Start: 51 @38931 has 62 MA's), (Start: 53 @38925 has 3 MA's), (Start: 54 @38922 has 1 MA's),  
(Start: 87 @38847 has 221 MA's), (Start: 113 @38778 has 1 MA's), (115, 38775), (117, 38772), (138,  
38718), (195, 38505), (228, 38298),

Gene: Held\_47 Start: 39982, Stop: 39422, Start Num: 87

Candidate Starts for Held\_47:

(Start: 51 @40066 has 62 MA's), (Start: 53 @40060 has 3 MA's), (Start: 54 @40057 has 1 MA's),  
(Start: 87 @39982 has 221 MA's), (Start: 113 @39913 has 1 MA's), (115, 39910), (117, 39907), (177,  
39742), (195, 39640), (228, 39433),

Gene: HenryJackson\_46 Start: 39992, Stop: 39438, Start Num: 87

Candidate Starts for HenryJackson\_46:

(Start: 51 @40076 has 62 MA's), (Start: 53 @40070 has 3 MA's), (Start: 54 @40067 has 1 MA's),  
(Start: 87 @39992 has 221 MA's), (Start: 113 @39929 has 1 MA's), (115, 39926), (117, 39923), (138,  
39869), (195, 39656), (214, 39590), (228, 39449),

Gene: Hertubise\_47 Start: 40376, Stop: 39732, Start Num: 51

Candidate Starts for Hertubise\_47:

(Start: 51 @40376 has 62 MA's), (Start: 53 @40370 has 3 MA's), (Start: 54 @40367 has 1 MA's),  
(Start: 87 @40292 has 221 MA's), (Start: 113 @40223 has 1 MA's), (115, 40220), (117, 40217), (177,  
40052), (195, 39950), (228, 39743),

Gene: Hetaeria\_47 Start: 40294, Stop: 39734, Start Num: 87

Candidate Starts for Hetaeria\_47:

(Start: 51 @40378 has 62 MA's), (Start: 53 @40372 has 3 MA's), (Start: 54 @40369 has 1 MA's),  
(Start: 87 @40294 has 221 MA's), (Start: 113 @40225 has 1 MA's), (115, 40222), (117, 40219), (177,  
40054), (195, 39952), (228, 39745),

Gene: HighStump\_47 Start: 40119, Stop: 39559, Start Num: 87

Candidate Starts for HighStump\_47:

(Start: 51 @40203 has 62 MA's), (Start: 53 @40197 has 3 MA's), (Start: 54 @40194 has 1 MA's),  
(Start: 87 @40119 has 221 MA's), (Start: 113 @40050 has 1 MA's), (115, 40047), (117, 40044), (138,  
39990), (195, 39777),

Gene: Hocus\_46 Start: 39981, Stop: 39427, Start Num: 87

Candidate Starts for Hocus\_46:

(Start: 51 @40065 has 62 MA's), (Start: 53 @40059 has 3 MA's), (Start: 54 @40056 has 1 MA's),  
(Start: 87 @39981 has 221 MA's), (Start: 113 @39918 has 1 MA's), (115, 39915), (117, 39912), (138,  
39858), (195, 39645), (214, 39579), (228, 39438),

Gene: HogWash\_47 Start: 40290, Stop: 39730, Start Num: 87

Candidate Starts for HogWash\_47:

(Start: 51 @40374 has 62 MA's), (Start: 53 @40368 has 3 MA's), (Start: 54 @40365 has 1 MA's),  
(Start: 87 @40290 has 221 MA's), (Start: 113 @40221 has 1 MA's), (115, 40218), (117, 40215), (138,  
40161), (177, 40050), (195, 39948), (228, 39741),

Gene: Holeinone\_46 Start: 40681, Stop: 39917, Start Num: 22

Candidate Starts for Holeinone\_46:

(Start: 22 @40681 has 46 MA's), (37, 40639), (48, 40594), (78, 40537), (79, 40528), (80, 40525), (84,  
40516), (108, 40429), (Start: 113 @40414 has 1 MA's), (145, 40330), (177, 40237), (186, 40186), (195,  
40135), (208, 40096),

Gene: Horchata\_47 Start: 40272, Stop: 39712, Start Num: 87

Candidate Starts for Horchata\_47:

(Start: 51 @40356 has 62 MA's), (Start: 53 @40350 has 3 MA's), (Start: 54 @40347 has 1 MA's),  
(Start: 87 @40272 has 221 MA's), (Start: 113 @40203 has 1 MA's), (115, 40200), (117, 40197), (138,  
40143), (195, 39930), (228, 39723),

Gene: Hosp\_037 Start: 36449, Stop: 35679, Start Num: 22

Candidate Starts for Hosp\_037:

(Start: 22 @36449 has 46 MA's), (31, 36410), (78, 36302), (80, 36290), (Start: 88 @36266 has 2 MA's),  
(109, 36188), (176, 36002), (177, 35999), (180, 35978), (195, 35897), (199, 35882),

Gene: HyRo\_93 Start: 50590, Stop: 51222, Start Num: 86

Candidate Starts for HyRo\_93:

(Start: 86 @50590 has 180 MA's), (188, 50929), (207, 51007), (223, 51115), (232, 51217),

Gene: Hydro\_42 Start: 40465, Stop: 39707, Start Num: 29

Candidate Starts for Hydro\_42:

(Start: 29 @40465 has 26 MA's), (41, 40396), (Start: 86 @40288 has 180 MA's), (97, 40258), (115,  
40210), (120, 40198), (173, 40042), (177, 40027), (182, 39994), (195, 39925), (210, 39880), (217,  
39841), (227, 39733),

Gene: I3\_107 Start: 52305, Stop: 52937, Start Num: 86

Candidate Starts for I3\_107:

(Start: 86 @52305 has 180 MA's), (188, 52644), (207, 52722), (223, 52830), (232, 52932),

Gene: IkeLoa\_95 Start: 50415, Stop: 51053, Start Num: 86

Candidate Starts for IkeLoa\_95:

(Start: 86 @50415 has 180 MA's), (188, 50760), (207, 50838), (223, 50946), (232, 51048),

Gene: ImtiyazSitla\_47 Start: 40051, Stop: 39407, Start Num: 51

Candidate Starts for ImtiyazSitla\_47:

(Start: 51 @40051 has 62 MA's), (Start: 53 @40045 has 3 MA's), (Start: 54 @40042 has 1 MA's),  
(Start: 87 @39967 has 221 MA's), (Start: 113 @39898 has 1 MA's), (115, 39895), (117, 39892), (138,  
39838), (195, 39625),

Gene: Imvubu\_38 Start: 37209, Stop: 36445, Start Num: 22

Candidate Starts for Imvubu\_38:

(Start: 22 @37209 has 46 MA's), (Start: 42 @37146 has 3 MA's), (55, 37113), (Start: 70 @37077 has 3  
MA's), (78, 37062), (Start: 88 @37026 has 2 MA's), (101, 36978), (119, 36927), (190, 36699), (195,  
36663), (199, 36648), (200, 36645), (208, 36624),

Gene: Inchworm\_48 Start: 40405, Stop: 39845, Start Num: 87

Candidate Starts for Inchworm\_48:

(Start: 51 @40489 has 62 MA's), (Start: 53 @40483 has 3 MA's), (Start: 54 @40480 has 1 MA's),  
(Start: 87 @40405 has 221 MA's), (Start: 113 @40336 has 1 MA's), (115, 40333), (117, 40330), (138,  
40276), (195, 40063),

Gene: Indlovu\_44 Start: 39795, Stop: 38992, Start Num: 22

Candidate Starts for Indlovu\_44:

(Start: 22 @39795 has 46 MA's), (92, 39591), (115, 39525), (133, 39477), (145, 39441), (166, 39354),  
(176, 39315), (177, 39312), (195, 39210), (196, 39204), (199, 39195), (208, 39171), (214, 39144),  
(224, 39072), (227, 39018),

Gene: InigoMontoya\_102 Start: 50299, Stop: 50931, Start Num: 86

Candidate Starts for InigoMontoya\_102:

(Start: 45 @50212 has 5 MA's), (Start: 86 @50299 has 180 MA's), (188, 50638), (207, 50716), (223, 50824), (232, 50926),

Gene: InterFolia\_109 Start: 53313, Stop: 53945, Start Num: 86

Candidate Starts for InterFolia\_109:

(Start: 45 @53226 has 5 MA's), (Start: 86 @53313 has 180 MA's), (188, 53652), (207, 53730), (223, 53838), (232, 53940),

Gene: Inverness\_47 Start: 40365, Stop: 39721, Start Num: 51

Candidate Starts for Inverness\_47:

(Start: 51 @40365 has 62 MA's), (Start: 53 @40359 has 3 MA's), (Start: 54 @40356 has 1 MA's), (Start: 87 @40281 has 221 MA's), (Start: 113 @40212 has 1 MA's), (115, 40209), (117, 40206), (138, 40152), (177, 40041), (195, 39939), (228, 39732),

Gene: Iota\_96 Start: 50775, Stop: 51407, Start Num: 86

Candidate Starts for Iota\_96:

(Start: 86 @50775 has 180 MA's), (188, 51114), (207, 51192), (223, 51300), (232, 51402),

Gene: Iridessa\_47 Start: 39977, Stop: 39423, Start Num: 87

Candidate Starts for Iridessa\_47:

(Start: 51 @40061 has 62 MA's), (Start: 53 @40055 has 3 MA's), (Start: 54 @40052 has 1 MA's), (Start: 87 @39977 has 221 MA's), (Start: 113 @39914 has 1 MA's), (115, 39911), (117, 39908), (138, 39854), (195, 39641), (214, 39575), (228, 39434),

Gene: Iridoclysis\_47 Start: 40264, Stop: 39704, Start Num: 87

Candidate Starts for Iridoclysis\_47:

(Start: 51 @40348 has 62 MA's), (Start: 53 @40342 has 3 MA's), (Start: 54 @40339 has 1 MA's), (Start: 87 @40264 has 221 MA's), (Start: 113 @40195 has 1 MA's), (115, 40192), (117, 40189), (138, 40135), (195, 39922), (228, 39715),

Gene: IsaacEli\_48 Start: 40507, Stop: 39863, Start Num: 51

Candidate Starts for IsaacEli\_48:

(Start: 51 @40507 has 62 MA's), (Start: 53 @40501 has 3 MA's), (Start: 54 @40498 has 1 MA's), (Start: 87 @40423 has 221 MA's), (Start: 113 @40354 has 1 MA's), (115, 40351), (117, 40348), (138, 40294), (195, 40081),

Gene: Issimir\_100 Start: 51778, Stop: 52416, Start Num: 86

Candidate Starts for Issimir\_100:

(Start: 86 @51778 has 180 MA's), (188, 52123), (207, 52201), (223, 52309), (232, 52411),

Gene: ItsyBitsy1\_46 Start: 40683, Stop: 39919, Start Num: 22

Candidate Starts for ItsyBitsy1\_46:

(Start: 22 @40683 has 46 MA's), (48, 40596), (78, 40539), (79, 40530), (80, 40527), (84, 40518), (108, 40431), (Start: 113 @40416 has 1 MA's), (145, 40332), (177, 40239), (186, 40188), (195, 40137), (208, 40098),

Gene: Izajani\_101 Start: 51984, Stop: 52622, Start Num: 86

Candidate Starts for Izajani\_101:

(Start: 86 @51984 has 180 MA's), (188, 52329), (207, 52407), (223, 52515), (232, 52617),

Gene: JAMaL\_42 Start: 40606, Stop: 39878, Start Num: 29

Candidate Starts for JAMaL\_42:

(19, 40660), (Start: 29 @40606 has 26 MA's), (78, 40465), (84, 40444), (Start: 88 @40429 has 2 MA's), (126, 40324), (175, 40204), (177, 40198), (195, 40096), (210, 40051), (214, 40030), (217, 40012), (227, 39904),

Gene: JDog\_46 Start: 40001, Stop: 39441, Start Num: 87

Candidate Starts for JDog\_46:

(Start: 51 @40085 has 62 MA's), (Start: 53 @40079 has 3 MA's), (Start: 54 @40076 has 1 MA's), (Start: 87 @40001 has 221 MA's), (Start: 113 @39932 has 1 MA's), (115, 39929), (117, 39926), (138, 39872), (177, 39761), (195, 39659), (228, 39452),

Gene: JPickles\_99 Start: 49482, Stop: 50201, Start Num: 45

Candidate Starts for JPickles\_99:

(Start: 45 @49482 has 5 MA's), (Start: 86 @49569 has 180 MA's), (188, 49908), (207, 49986), (223, 50094), (232, 50196),

Gene: JacAttac\_48 Start: 40483, Stop: 39845, Start Num: 53

Candidate Starts for JacAttac\_48:

(Start: 51 @40489 has 62 MA's), (Start: 53 @40483 has 3 MA's), (Start: 54 @40480 has 1 MA's), (Start: 87 @40405 has 221 MA's), (Start: 113 @40336 has 1 MA's), (115, 40333), (117, 40330), (138, 40276), (195, 40063),

Gene: JaguarMi\_42 Start: 39908, Stop: 39174, Start Num: 29

Candidate Starts for JaguarMi\_42:

(Start: 29 @39908 has 26 MA's), (Start: 86 @39734 has 180 MA's), (97, 39704), (115, 39656), (120, 39644), (154, 39554), (175, 39500), (177, 39494), (195, 39392), (210, 39347), (217, 39308),

Gene: JakeO\_46 Start: 40000, Stop: 39440, Start Num: 87

Candidate Starts for JakeO\_46:

(Start: 51 @40084 has 62 MA's), (Start: 53 @40078 has 3 MA's), (Start: 54 @40075 has 1 MA's), (Start: 87 @40000 has 221 MA's), (Start: 113 @39931 has 1 MA's), (115, 39928), (117, 39925), (138, 39871), (195, 39658), (228, 39451),

Gene: JangoPhett\_47 Start: 40275, Stop: 39715, Start Num: 87

Candidate Starts for JangoPhett\_47:

(Start: 51 @40359 has 62 MA's), (Start: 53 @40353 has 3 MA's), (Start: 54 @40350 has 1 MA's), (Start: 87 @40275 has 221 MA's), (Start: 113 @40206 has 1 MA's), (115, 40203), (117, 40200), (177, 40035), (195, 39933), (228, 39726),

Gene: Janiyra\_103 Start: 51265, Stop: 51897, Start Num: 86

Candidate Starts for Janiyra\_103:

(Start: 86 @51265 has 180 MA's), (188, 51604), (207, 51682), (223, 51790), (232, 51892),

Gene: JayJay\_107 Start: 53030, Stop: 53662, Start Num: 86

Candidate Starts for JayJay\_107:

(Start: 86 @53030 has 180 MA's), (188, 53369), (207, 53447), (223, 53555), (232, 53657),

Gene: Jaygup\_101 Start: 51094, Stop: 51726, Start Num: 86

Candidate Starts for Jaygup\_101:

(Start: 45 @51007 has 5 MA's), (Start: 86 @51094 has 180 MA's), (188, 51433), (207, 51511), (223, 51619), (232, 51721),

Gene: Jedediah\_104 Start: 51627, Stop: 52259, Start Num: 86

Candidate Starts for Jedediah\_104:

(Start: 45 @51540 has 5 MA's), (Start: 86 @51627 has 180 MA's), (188, 51966), (207, 52044), (223, 52152), (232, 52254),

Gene: JellyBelly\_40 Start: 33927, Stop: 33238, Start Num: 44

Candidate Starts for JellyBelly\_40:

(Start: 44 @33927 has 11 MA's), (97, 33783), (105, 33756), (127, 33678), (177, 33552), (195, 33450), (199, 33435), (213, 33387),

Gene: Jemmno\_101 Start: 51074, Stop: 51706, Start Num: 86

Candidate Starts for Jemmno\_101:

(Start: 45 @50987 has 5 MA's), (Start: 86 @51074 has 180 MA's), (188, 51413), (207, 51491), (223, 51599), (232, 51701),

Gene: Jesabah\_47 Start: 40003, Stop: 39443, Start Num: 87

Candidate Starts for Jesabah\_47:

(Start: 51 @40087 has 62 MA's), (Start: 53 @40081 has 3 MA's), (Start: 54 @40078 has 1 MA's), (Start: 87 @40003 has 221 MA's), (Start: 113 @39934 has 1 MA's), (115, 39931), (117, 39928), (177, 39763), (195, 39661), (228, 39454),

Gene: Jessibeth14\_100 Start: 51589, Stop: 52227, Start Num: 86

Candidate Starts for Jessibeth14\_100:

(Start: 86 @51589 has 180 MA's), (188, 51934), (207, 52012), (223, 52120), (232, 52222),

Gene: Jezreel\_101 Start: 51758, Stop: 52390, Start Num: 86

Candidate Starts for Jezreel\_101:

(Start: 86 @51758 has 180 MA's), (188, 52097), (207, 52175), (223, 52283), (232, 52385),

Gene: JigglyPuff\_109 Start: 53918, Stop: 54556, Start Num: 86

Candidate Starts for JigglyPuff\_109:

(Start: 86 @53918 has 180 MA's), (188, 54263), (207, 54341), (223, 54449), (232, 54551),

Gene: Jillium\_46 Start: 39994, Stop: 39434, Start Num: 87

Candidate Starts for Jillium\_46:

(Start: 51 @40078 has 62 MA's), (Start: 53 @40072 has 3 MA's), (Start: 54 @40069 has 1 MA's), (Start: 87 @39994 has 221 MA's), (Start: 113 @39925 has 1 MA's), (115, 39922), (117, 39919), (177, 39754), (195, 39652), (228, 39445),

Gene: Jiminy\_46 Start: 39835, Stop: 39275, Start Num: 87

Candidate Starts for Jiminy\_46:

(Start: 51 @39919 has 62 MA's), (Start: 53 @39913 has 3 MA's), (Start: 54 @39910 has 1 MA's), (Start: 87 @39835 has 221 MA's), (Start: 113 @39766 has 1 MA's), (115, 39763), (117, 39760), (138, 39706), (195, 39493), (228, 39286),

Gene: Jiraiya\_46 Start: 39988, Stop: 39428, Start Num: 87

Candidate Starts for Jiraiya\_46:

(Start: 51 @40072 has 62 MA's), (Start: 53 @40066 has 3 MA's), (Start: 54 @40063 has 1 MA's), (Start: 87 @39988 has 221 MA's), (Start: 113 @39919 has 1 MA's), (115, 39916), (117, 39913), (138, 39859), (195, 39646), (228, 39439),

Gene: Jolie1\_039 Start: 38233, Stop: 37463, Start Num: 22

Candidate Starts for Jolie1\_039:

(Start: 22 @38233 has 46 MA's), (31, 38194), (78, 38086), (80, 38074), (Start: 88 @38050 has 2 MA's), (109, 37972), (164, 37813), (176, 37786), (177, 37783), (180, 37762), (195, 37681), (199, 37666),

Gene: JoyceMaria\_42 Start: 40421, Stop: 39693, Start Num: 29

Candidate Starts for JoyceMaria\_42:

(Start: 29 @40421 has 26 MA's), (Start: 86 @40253 has 180 MA's), (97, 40223), (98, 40220), (115, 40175), (120, 40163), (175, 40019), (177, 40013), (195, 39911), (210, 39866), (217, 39827), (227, 39719),

Gene: JulietS\_95 Start: 49032, Stop: 49664, Start Num: 86

Candidate Starts for JulietS\_95:

(Start: 86 @49032 has 180 MA's), (188, 49371), (207, 49449), (223, 49557), (232, 49659),

Gene: JustHall\_98 Start: 51127, Stop: 51765, Start Num: 86

Candidate Starts for JustHall\_98:

(Start: 86 @51127 has 180 MA's), (188, 51472), (207, 51550), (223, 51658), (232, 51760),

Gene: KLucky39\_47 Start: 40279, Stop: 39719, Start Num: 87

Candidate Starts for KLucky39\_47:

(Start: 51 @40363 has 62 MA's), (Start: 53 @40357 has 3 MA's), (Start: 54 @40354 has 1 MA's), (Start: 87 @40279 has 221 MA's), (Start: 113 @40210 has 1 MA's), (115, 40207), (117, 40204), (138, 40150), (177, 40039), (195, 39937), (228, 39730),

Gene: Kahve\_46 Start: 39989, Stop: 39435, Start Num: 87

Candidate Starts for Kahve\_46:

(Start: 51 @40073 has 62 MA's), (Start: 53 @40067 has 3 MA's), (Start: 54 @40064 has 1 MA's), (Start: 87 @39989 has 221 MA's), (Start: 113 @39926 has 1 MA's), (115, 39923), (117, 39920), (138, 39866), (195, 39653), (214, 39587), (228, 39446),

Gene: Kailash\_47 Start: 40336, Stop: 39776, Start Num: 87

Candidate Starts for Kailash\_47:

(Start: 51 @40420 has 62 MA's), (Start: 53 @40414 has 3 MA's), (Start: 54 @40411 has 1 MA's), (Start: 87 @40336 has 221 MA's), (115, 40264), (117, 40261), (138, 40207), (177, 40096), (195, 39994), (228, 39787),

Gene: Kaleb\_46 Start: 40816, Stop: 40052, Start Num: 22

Candidate Starts for Kaleb\_46:

(Start: 22 @40816 has 46 MA's), (37, 40774), (48, 40729), (78, 40672), (79, 40663), (80, 40660), (84, 40651), (108, 40564), (Start: 113 @40549 has 1 MA's), (145, 40465), (177, 40372), (186, 40321), (195, 40270), (208, 40231),

Gene: Kamryn\_101 Start: 52411, Stop: 53043, Start Num: 86

Candidate Starts for Kamryn\_101:

(40, 52300), (Start: 86 @52411 has 180 MA's), (188, 52750), (207, 52828), (223, 52936), (232, 53038),

Gene: KarasumaRum\_47 Start: 41044, Stop: 40259, Start Num: 26

Candidate Starts for KarasumaRum\_47:

(7, 41194), (9, 41158), (13, 41128), (18, 41089), (Start: 26 @41044 has 8 MA's), (79, 40882), (Start: 88 @40855 has 2 MA's), (119, 40756), (145, 40681), (177, 40579), (195, 40477), (196, 40471), (199, 40462), (213, 40414),

Gene: Karn\_46 Start: 39995, Stop: 39435, Start Num: 87

Candidate Starts for Karn\_46:

(Start: 51 @40079 has 62 MA's), (Start: 53 @40073 has 3 MA's), (Start: 54 @40070 has 1 MA's),  
(Start: 87 @39995 has 221 MA's), (Start: 113 @39926 has 1 MA's), (115, 39923), (117, 39920), (138,  
39866), (195, 39653), (228, 39446),

Gene: Karp\_256 Start: 124709, Stop: 125182, Start Num: 124

Candidate Starts for Karp\_256:

(118, 124691), (Start: 124 @124709 has 6 MA's), (170, 124835), (172, 124838), (179, 124871), (194,  
124946), (201, 124982), (215, 125039), (218, 125057), (225, 125123), (227, 125162),

Gene: Katniss\_48 Start: 40432, Stop: 39872, Start Num: 87

Candidate Starts for Katniss\_48:

(Start: 51 @40516 has 62 MA's), (Start: 53 @40510 has 3 MA's), (Start: 54 @40507 has 1 MA's),  
(Start: 87 @40432 has 221 MA's), (Start: 113 @40363 has 1 MA's), (115, 40360), (117, 40357), (138,  
40303), (195, 40090),

Gene: KayaCho\_39 Start: 38235, Stop: 37462, Start Num: 22

Candidate Starts for KayaCho\_39:

(Start: 22 @38235 has 46 MA's), (78, 38085), (Start: 88 @38049 has 2 MA's), (109, 37971), (164,  
37812), (176, 37785), (177, 37782), (180, 37761), (195, 37680), (199, 37665), (206, 37647),

Gene: Kboogie\_105 Start: 50769, Stop: 51401, Start Num: 86

Candidate Starts for Kboogie\_105:

(Start: 86 @50769 has 180 MA's), (188, 51108), (207, 51186), (223, 51294), (232, 51396),

Gene: Keitherie\_47 Start: 40335, Stop: 39775, Start Num: 87

Candidate Starts for Keitherie\_47:

(Start: 51 @40419 has 62 MA's), (Start: 53 @40413 has 3 MA's), (Start: 54 @40410 has 1 MA's),  
(Start: 87 @40335 has 221 MA's), (Start: 113 @40266 has 1 MA's), (115, 40263), (117, 40260), (138,  
40206), (195, 39993), (228, 39786),

Gene: Khaleesi\_100 Start: 51704, Stop: 52342, Start Num: 86

Candidate Starts for Khaleesi\_100:

(Start: 86 @51704 has 180 MA's), (188, 52049), (207, 52127), (223, 52235), (232, 52337),

Gene: Khan1\_47 Start: 40010, Stop: 39456, Start Num: 87

Candidate Starts for Khan1\_47:

(Start: 51 @40094 has 62 MA's), (Start: 53 @40088 has 3 MA's), (Start: 54 @40085 has 1 MA's),  
(Start: 87 @40010 has 221 MA's), (Start: 113 @39947 has 1 MA's), (115, 39944), (117, 39941), (138,  
39887), (195, 39674), (214, 39608), (228, 39467),

Gene: Kheth\_46 Start: 40734, Stop: 39940, Start Num: 22

Candidate Starts for Kheth\_46:

(Start: 22 @40734 has 46 MA's), (37, 40662), (48, 40617), (78, 40560), (79, 40551), (80, 40548), (84,  
40539), (108, 40452), (Start: 113 @40437 has 1 MA's), (145, 40353), (177, 40260), (186, 40209), (195,  
40158), (208, 40119),

Gene: Kikipoo\_48 Start: 40507, Stop: 39863, Start Num: 51

Candidate Starts for Kikipoo\_48:

(Start: 51 @40507 has 62 MA's), (Start: 53 @40501 has 3 MA's), (Start: 54 @40498 has 1 MA's),  
(Start: 87 @40423 has 221 MA's), (Start: 113 @40354 has 1 MA's), (115, 40351), (117, 40348), (138,  
40294), (195, 40081),

Gene: Kimbrough\_47 Start: 39996, Stop: 39436, Start Num: 87

Candidate Starts for Kimbrough\_47:

(Start: 51 @40080 has 62 MA's), (Start: 53 @40074 has 3 MA's), (Start: 54 @40071 has 1 MA's),  
(Start: 87 @39996 has 221 MA's), (Start: 113 @39927 has 1 MA's), (115, 39924), (117, 39921), (138,  
39867), (195, 39654), (228, 39447),

Gene: KingTut\_38 Start: 35659, Stop: 35099, Start Num: 87

Candidate Starts for KingTut\_38:

(Start: 51 @35743 has 62 MA's), (Start: 53 @35737 has 3 MA's), (Start: 54 @35734 has 1 MA's),  
(Start: 87 @35659 has 221 MA's), (Start: 113 @35590 has 1 MA's), (115, 35587), (117, 35584), (138,  
35530), (195, 35317), (228, 35110),

Gene: KingVeVeVe\_47 Start: 40266, Stop: 39706, Start Num: 87

Candidate Starts for KingVeVeVe\_47:

(Start: 74 @40308 has 3 MA's), (Start: 87 @40266 has 221 MA's), (Start: 113 @40197 has 1 MA's),  
(115, 40194), (117, 40191), (138, 40137), (195, 39924), (228, 39717),

Gene: KlimbOn\_47 Start: 40357, Stop: 39713, Start Num: 51

Candidate Starts for KlimbOn\_47:

(Start: 51 @40357 has 62 MA's), (Start: 53 @40351 has 3 MA's), (Start: 54 @40348 has 1 MA's),  
(Start: 87 @40273 has 221 MA's), (Start: 113 @40204 has 1 MA's), (115, 40201), (117, 40198), (138,  
40144), (177, 40033), (195, 39931), (228, 39724),

Gene: Kloppinator\_47 Start: 40299, Stop: 39739, Start Num: 87

Candidate Starts for Kloppinator\_47:

(47, 40392), (Start: 53 @40377 has 3 MA's), (Start: 54 @40374 has 1 MA's), (Start: 87 @40299 has  
221 MA's), (Start: 113 @40230 has 1 MA's), (115, 40227), (117, 40224), (177, 40059), (195, 39957),  
(228, 39750),

Gene: Klocker\_47 Start: 42121, Stop: 41354, Start Num: 22

Candidate Starts for Klocker\_47:

(Start: 22 @42121 has 46 MA's), (69, 41983), (75, 41974), (78, 41968), (Start: 86 @41941 has 180  
MA's), (Start: 88 @41932 has 2 MA's), (94, 41908), (164, 41704), (176, 41677), (177, 41674), (180,  
41653), (190, 41608), (195, 41572), (208, 41533), (225, 41419), (227, 41380),

Gene: Koguma\_98 Start: 49254, Stop: 49886, Start Num: 86

Candidate Starts for Koguma\_98:

(Start: 86 @49254 has 180 MA's), (188, 49593), (207, 49671), (223, 49779), (232, 49881),

Gene: Kolhan\_46 Start: 40689, Stop: 39931, Start Num: 22

Candidate Starts for Kolhan\_46:

(Start: 22 @40689 has 46 MA's), (48, 40608), (78, 40551), (79, 40542), (80, 40539), (84, 40530), (108,  
40443), (Start: 113 @40428 has 1 MA's), (145, 40344), (177, 40251), (186, 40200), (195, 40149), (208,  
40110),

Gene: Kwadwo\_46 Start: 39971, Stop: 39417, Start Num: 87

Candidate Starts for Kwadwo\_46:

(Start: 51 @40055 has 62 MA's), (Start: 53 @40049 has 3 MA's), (Start: 54 @40046 has 1 MA's),  
(Start: 87 @39971 has 221 MA's), (Start: 113 @39908 has 1 MA's), (115, 39905), (117, 39902), (138,  
39848), (195, 39635), (214, 39569), (228, 39428),

Gene: Kwksand96\_46 Start: 39846, Stop: 39286, Start Num: 87

Candidate Starts for Kwksand96\_46:

(Start: 51 @39930 has 62 MA's), (Start: 53 @39924 has 3 MA's), (Start: 54 @39921 has 1 MA's),  
(Start: 87 @39846 has 221 MA's), (Start: 113 @39777 has 1 MA's), (115, 39774), (117, 39771), (177,  
39606), (195, 39504), (228, 39297),

Gene: LRRHood\_96 Start: 51308, Stop: 51940, Start Num: 86

Candidate Starts for LRRHood\_96:

(Start: 86 @51308 has 180 MA's), (188, 51647), (207, 51725), (223, 51833), (232, 51935),

Gene: Labeouficaum\_46 Start: 39841, Stop: 39281, Start Num: 87

Candidate Starts for Labeouficaum\_46:

(Start: 51 @39925 has 62 MA's), (Start: 53 @39919 has 3 MA's), (Start: 54 @39916 has 1 MA's),  
(Start: 87 @39841 has 221 MA's), (Start: 113 @39772 has 1 MA's), (115, 39769), (117, 39766), (177,  
39601), (195, 39499), (228, 39292),

Gene: Labradorite\_100 Start: 50025, Stop: 50657, Start Num: 86

Candidate Starts for Labradorite\_100:

(Start: 45 @49938 has 5 MA's), (Start: 86 @50025 has 180 MA's), (188, 50364), (207, 50442), (223,  
50550), (232, 50652),

Gene: Lambano\_41 Start: 39407, Stop: 38679, Start Num: 29

Candidate Starts for Lambano\_41:

(Start: 29 @39407 has 26 MA's), (78, 39266), (84, 39245), (Start: 88 @39230 has 2 MA's), (126,  
39125), (175, 39005), (177, 38999), (195, 38897), (210, 38852),

Gene: Lars\_46 Start: 40806, Stop: 40042, Start Num: 22

Candidate Starts for Lars\_46:

(Start: 22 @40806 has 46 MA's), (37, 40764), (48, 40719), (78, 40662), (79, 40653), (80, 40650), (84,  
40641), (108, 40554), (Start: 113 @40539 has 1 MA's), (145, 40455), (177, 40362), (186, 40311), (195,  
40260), (208, 40221),

Gene: Larson\_48 Start: 40393, Stop: 39833, Start Num: 87

Candidate Starts for Larson\_48:

(Start: 51 @40477 has 62 MA's), (Start: 53 @40471 has 3 MA's), (Start: 54 @40468 has 1 MA's),  
(Start: 87 @40393 has 221 MA's), (Start: 113 @40324 has 1 MA's), (115, 40321), (117, 40318), (138,  
40264), (195, 40051), (228, 39844),

Gene: LasagnaCat\_48 Start: 40417, Stop: 39857, Start Num: 87

Candidate Starts for LasagnaCat\_48:

(Start: 51 @40501 has 62 MA's), (Start: 53 @40495 has 3 MA's), (Start: 54 @40492 has 1 MA's),  
(Start: 87 @40417 has 221 MA's), (Start: 113 @40348 has 1 MA's), (115, 40345), (117, 40342), (138,  
40288), (195, 40075),

Gene: Lasso\_47 Start: 40246, Stop: 39692, Start Num: 87

Candidate Starts for Lasso\_47:

(Start: 51 @40330 has 62 MA's), (Start: 53 @40324 has 3 MA's), (Start: 54 @40321 has 1 MA's),  
(Start: 87 @40246 has 221 MA's), (Start: 113 @40183 has 1 MA's), (115, 40180), (117, 40177), (138,  
40123), (195, 39910), (214, 39844), (228, 39703),

Gene: Latch\_101 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for Latch\_101:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223,  
50863), (232, 50965),

Gene: Laurie\_45 Start: 40205, Stop: 39441, Start Num: 22

Candidate Starts for Laurie\_45:

(Start: 22 @40205 has 46 MA's), (48, 40118), (78, 40061), (79, 40052), (80, 40049), (84, 40040), (108, 39953), (Start: 113 @39938 has 1 MA's), (145, 39854), (186, 39710), (195, 39659), (208, 39620),

Gene: Lee7\_99 Start: 52340, Stop: 52972, Start Num: 86

Candidate Starts for Lee7\_99:

(Start: 86 @52340 has 180 MA's), (188, 52679), (207, 52757), (223, 52865), (232, 52967),

Gene: LeeLot\_47 Start: 40367, Stop: 39723, Start Num: 51

Candidate Starts for LeeLot\_47:

(Start: 51 @40367 has 62 MA's), (Start: 53 @40361 has 3 MA's), (Start: 54 @40358 has 1 MA's), (Start: 87 @40283 has 221 MA's), (Start: 113 @40214 has 1 MA's), (115, 40211), (117, 40208), (177, 40043), (195, 39941), (228, 39734),

Gene: Lego3393\_46 Start: 40426, Stop: 39866, Start Num: 87

Candidate Starts for Lego3393\_46:

(Start: 51 @40510 has 62 MA's), (Start: 53 @40504 has 3 MA's), (Start: 54 @40501 has 1 MA's), (Start: 87 @40426 has 221 MA's), (Start: 113 @40357 has 1 MA's), (115, 40354), (117, 40351), (138, 40297), (195, 40084),

Gene: Legolas\_47 Start: 40016, Stop: 39462, Start Num: 87

Candidate Starts for Legolas\_47:

(Start: 51 @40100 has 62 MA's), (Start: 53 @40094 has 3 MA's), (Start: 54 @40091 has 1 MA's), (Start: 87 @40016 has 221 MA's), (Start: 113 @39953 has 1 MA's), (115, 39950), (117, 39947), (138, 39893), (195, 39680), (214, 39614), (228, 39473),

Gene: Lehmann\_47 Start: 39900, Stop: 39256, Start Num: 51

Candidate Starts for Lehmann\_47:

(Start: 51 @39900 has 62 MA's), (Start: 53 @39894 has 3 MA's), (Start: 54 @39891 has 1 MA's), (Start: 87 @39816 has 221 MA's), (Start: 113 @39747 has 1 MA's), (115, 39744), (117, 39741), (138, 39687), (177, 39576), (195, 39474), (228, 39267),

Gene: LeiMonet\_47 Start: 39978, Stop: 39424, Start Num: 87

Candidate Starts for LeiMonet\_47:

(Start: 51 @40062 has 62 MA's), (Start: 53 @40056 has 3 MA's), (Start: 54 @40053 has 1 MA's), (Start: 87 @39978 has 221 MA's), (Start: 113 @39915 has 1 MA's), (115, 39912), (117, 39909), (138, 39855), (195, 39642), (228, 39435),

Gene: LemonSlice\_47 Start: 39983, Stop: 39423, Start Num: 87

Candidate Starts for LemonSlice\_47:

(Start: 51 @40067 has 62 MA's), (Start: 53 @40061 has 3 MA's), (Start: 54 @40058 has 1 MA's), (Start: 87 @39983 has 221 MA's), (Start: 113 @39914 has 1 MA's), (115, 39911), (117, 39908), (177, 39743), (195, 39641), (228, 39434),

Gene: Lephleur\_46 Start: 40699, Stop: 39935, Start Num: 22

Candidate Starts for Lephleur\_46:

(Start: 22 @40699 has 46 MA's), (48, 40612), (78, 40555), (79, 40546), (80, 40543), (84, 40534), (108, 40447), (Start: 113 @40432 has 1 MA's), (145, 40348), (177, 40255), (186, 40204), (195, 40153), (208, 40114),

Gene: Lethe\_100 Start: 51781, Stop: 52413, Start Num: 86

Candidate Starts for Lethe\_100:

(Start: 86 @51781 has 180 MA's), (188, 52120), (207, 52198), (223, 52306), (232, 52408),

Gene: LifeSavor\_100 Start: 50939, Stop: 51658, Start Num: 45

Candidate Starts for LifeSavor\_100:

(Start: 45 @50939 has 5 MA's), (Start: 86 @51026 has 180 MA's), (188, 51365), (207, 51443), (223, 51551), (232, 51653),

Gene: Ligma\_40 Start: 34038, Stop: 33349, Start Num: 44

Candidate Starts for Ligma\_40:

(28, 34119), (39, 34071), (Start: 44 @34038 has 11 MA's), (99, 33888), (103, 33876), (105, 33867), (180, 33642), (195, 33561), (199, 33546), (213, 33498),

Gene: LilMcDreamy\_43 Start: 40014, Stop: 39223, Start Num: 24

Candidate Starts for LilMcDreamy\_43:

(Start: 24 @40014 has 1 MA's), (68, 39864), (99, 39765), (Start: 113 @39720 has 1 MA's), (122, 39696), (131, 39675), (148, 39627), (177, 39543), (199, 39426), (212, 39378),

Gene: LilSmirk\_46 Start: 40693, Stop: 39929, Start Num: 22

Candidate Starts for LilSmirk\_46:

(Start: 22 @40693 has 46 MA's), (48, 40606), (78, 40549), (79, 40540), (80, 40537), (84, 40528), (108, 40441), (Start: 113 @40426 has 1 MA's), (145, 40342), (177, 40249), (186, 40198), (195, 40147), (208, 40108),

Gene: LinStu\_101 Start: 51916, Stop: 52548, Start Num: 86

Candidate Starts for LinStu\_101:

(Start: 86 @51916 has 180 MA's), (188, 52255), (207, 52333), (223, 52441), (232, 52543),

Gene: LittleDigger\_41 Start: 39429, Stop: 38701, Start Num: 29

Candidate Starts for LittleDigger\_41:

(Start: 29 @39429 has 26 MA's), (78, 39288), (84, 39267), (Start: 88 @39252 has 2 MA's), (126, 39147), (175, 39027), (177, 39021), (195, 38919), (210, 38874),

Gene: LittleMinkey\_51 Start: 39746, Stop: 38958, Start Num: 22

Candidate Starts for LittleMinkey\_51:

(Start: 17 @39776 has 1 MA's), (Start: 22 @39746 has 46 MA's), (46, 39641), (49, 39635), (Start: 70 @39593 has 3 MA's), (78, 39578), (Start: 87 @39545 has 221 MA's), (Start: 88 @39542 has 2 MA's), (94, 39518), (177, 39278), (195, 39173), (208, 39134),

Gene: LittleMunchkin\_42 Start: 37302, Stop: 36634, Start Num: 44

Candidate Starts for LittleMunchkin\_42:

(36, 37341), (Start: 44 @37302 has 11 MA's), (90, 37188), (129, 37071), (145, 37023), (177, 36948), (183, 36906), (195, 36846), (199, 36831), (213, 36783),

Gene: Littleton\_101 Start: 51158, Stop: 51790, Start Num: 86

Candidate Starts for Littleton\_101:

(40, 51047), (Start: 86 @51158 has 180 MA's), (188, 51497), (207, 51575), (223, 51683), (232, 51785),

Gene: LizLemon\_46 Start: 40815, Stop: 40051, Start Num: 22

Candidate Starts for LizLemon\_46:

(Start: 22 @40815 has 46 MA's), (48, 40728), (78, 40671), (79, 40662), (80, 40659), (84, 40650), (108, 40563), (Start: 113 @40548 has 1 MA's), (145, 40464), (177, 40371), (186, 40320), (195, 40269), (208, 40230),

Gene: Loanshark\_101 Start: 51927, Stop: 52565, Start Num: 86

Candidate Starts for Loanshark\_101:

(Start: 86 @51927 has 180 MA's), (188, 52272), (207, 52350), (223, 52458), (232, 52560),

Gene: LolaVinca\_102 Start: 52032, Stop: 52664, Start Num: 86

Candidate Starts for LolaVinca\_102:

(Start: 45 @51945 has 5 MA's), (Start: 86 @52032 has 180 MA's), (188, 52371), (207, 52449), (223, 52557), (232, 52659),

Gene: Lolalove\_43 Start: 40432, Stop: 39704, Start Num: 29

Candidate Starts for Lolalove\_43:

(Start: 29 @40432 has 26 MA's), (Start: 86 @40264 has 180 MA's), (97, 40234), (98, 40231), (115, 40186), (120, 40174), (175, 40030), (177, 40024), (195, 39922), (210, 39877), (217, 39838), (227, 39730),

Gene: Longacauda\_46 Start: 39979, Stop: 39425, Start Num: 87

Candidate Starts for Longacauda\_46:

(Start: 51 @40063 has 62 MA's), (Start: 53 @40057 has 3 MA's), (Start: 54 @40054 has 1 MA's), (Start: 87 @39979 has 221 MA's), (Start: 113 @39916 has 1 MA's), (115, 39913), (117, 39910), (138, 39856), (195, 39643), (214, 39577), (228, 39436),

Gene: LookingGlass\_102 Start: 51850, Stop: 52488, Start Num: 86

Candidate Starts for LookingGlass\_102:

(Start: 86 @51850 has 180 MA's), (188, 52195), (207, 52273), (223, 52381), (232, 52483),

Gene: Lopsy\_46 Start: 39916, Stop: 39278, Start Num: 51

Candidate Starts for Lopsy\_46:

(Start: 51 @39916 has 62 MA's), (Start: 53 @39910 has 3 MA's), (Start: 54 @39907 has 1 MA's), (Start: 87 @39832 has 221 MA's), (Start: 113 @39769 has 1 MA's), (115, 39766), (117, 39763), (177, 39598), (195, 39496), (228, 39289),

Gene: LordLeafolot\_106 Start: 52996, Stop: 53628, Start Num: 86

Candidate Starts for LordLeafolot\_106:

(Start: 45 @52909 has 5 MA's), (Start: 86 @52996 has 180 MA's), (188, 53335), (207, 53413), (223, 53521), (232, 53623),

Gene: LostAndPhound\_46 Start: 39986, Stop: 39426, Start Num: 87

Candidate Starts for LostAndPhound\_46:

(Start: 51 @40070 has 62 MA's), (Start: 53 @40064 has 3 MA's), (Start: 54 @40061 has 1 MA's), (Start: 87 @39986 has 221 MA's), (Start: 113 @39917 has 1 MA's), (115, 39914), (117, 39911), (195, 39644), (214, 39578), (228, 39437),

Gene: LuckyMarjie\_46 Start: 39986, Stop: 39432, Start Num: 87

Candidate Starts for LuckyMarjie\_46:

(Start: 51 @40070 has 62 MA's), (Start: 53 @40064 has 3 MA's), (Start: 54 @40061 has 1 MA's), (Start: 87 @39986 has 221 MA's), (Start: 113 @39923 has 1 MA's), (115, 39920), (117, 39917), (138, 39863), (195, 39650), (214, 39584), (228, 39443),

Gene: Lukilu\_92 Start: 51439, Stop: 52071, Start Num: 86

Candidate Starts for Lukilu\_92:

(Start: 86 @51439 has 180 MA's), (188, 51778), (207, 51856), (223, 51964), (232, 52066),

Gene: Lulumae\_46 Start: 40055, Stop: 39417, Start Num: 51

Candidate Starts for Lulumae\_46:

(Start: 51 @40055 has 62 MA's), (Start: 53 @40049 has 3 MA's), (Start: 54 @40046 has 1 MA's),  
(Start: 87 @39971 has 221 MA's), (Start: 113 @39908 has 1 MA's), (115, 39905), (117, 39902), (138,  
39848), (195, 39635), (214, 39569), (228, 39428),

Gene: Lulwa\_47 Start: 40264, Stop: 39704, Start Num: 87

Candidate Starts for Lulwa\_47:

(Start: 51 @40348 has 62 MA's), (Start: 53 @40342 has 3 MA's), (Start: 54 @40339 has 1 MA's),  
(Start: 87 @40264 has 221 MA's), (Start: 113 @40195 has 1 MA's), (115, 40192), (117, 40189), (138,  
40135), (177, 40024), (195, 39922), (228, 39715),

Gene: Lumine\_46 Start: 39967, Stop: 39413, Start Num: 87

Candidate Starts for Lumine\_46:

(Start: 51 @40051 has 62 MA's), (Start: 53 @40045 has 3 MA's), (Start: 54 @40042 has 1 MA's),  
(Start: 87 @39967 has 221 MA's), (Start: 113 @39904 has 1 MA's), (115, 39901), (117, 39898), (138,  
39844), (195, 39631), (214, 39565), (228, 39424),

Gene: Lunareta\_100 Start: 52949, Stop: 53581, Start Num: 86

Candidate Starts for Lunareta\_100:

(Start: 86 @52949 has 180 MA's), (188, 53288), (207, 53366), (223, 53474), (232, 53576),

Gene: MRabcd\_46 Start: 39977, Stop: 39417, Start Num: 87

Candidate Starts for MRabcd\_46:

(Start: 51 @40061 has 62 MA's), (Start: 53 @40055 has 3 MA's), (Start: 54 @40052 has 1 MA's),  
(Start: 87 @39977 has 221 MA's), (Start: 113 @39908 has 1 MA's), (115, 39905), (117, 39902), (138,  
39848), (195, 39635), (228, 39428),

Gene: Maby2021\_101 Start: 51803, Stop: 52435, Start Num: 86

Candidate Starts for Maby2021\_101:

(Start: 86 @51803 has 180 MA's), (188, 52142), (207, 52220), (223, 52328), (232, 52430),

Gene: Mag7\_46 Start: 39886, Stop: 39326, Start Num: 87

Candidate Starts for Mag7\_46:

(Start: 51 @39970 has 62 MA's), (Start: 53 @39964 has 3 MA's), (Start: 54 @39961 has 1 MA's),  
(Start: 87 @39886 has 221 MA's), (115, 39814), (117, 39811), (138, 39757), (177, 39646), (195,  
39544), (228, 39337),

Gene: Magic8\_47 Start: 40321, Stop: 39761, Start Num: 87

Candidate Starts for Magic8\_47:

(Start: 51 @40405 has 62 MA's), (Start: 53 @40399 has 3 MA's), (Start: 54 @40396 has 1 MA's),  
(Start: 87 @40321 has 221 MA's), (115, 40249), (117, 40246), (138, 40192), (177, 40081), (195,  
39979), (228, 39772),

Gene: Magpie\_41 Start: 40274, Stop: 39540, Start Num: 29

Candidate Starts for Magpie\_41:

(Start: 29 @40274 has 26 MA's), (Start: 86 @40100 has 180 MA's), (97, 40070), (115, 40022), (120,  
40010), (175, 39866), (177, 39860), (195, 39758), (210, 39713), (217, 39674),

Gene: Mahdia\_50 Start: 37783, Stop: 37172, Start Num: 74

Candidate Starts for Mahdia\_50:

(Start: 74 @37783 has 3 MA's), (143, 37585), (183, 37432), (185, 37426), (190, 37408), (219, 37285),  
(222, 37255),

Gene: MakoManhole\_42 Start: 35872, Stop: 35297, Start Num: 83

Candidate Starts for MakoManhole\_42:

(Start: 83 @35872 has 11 MA's), (99, 35833), (140, 35722), (155, 35683), (184, 35560), (188, 35548), (190, 35539), (197, 35497), (199, 35494), (200, 35491), (203, 35482),

Gene: Mana\_46 Start: 39986, Stop: 39432, Start Num: 87

Candidate Starts for Mana\_46:

(Start: 51 @40070 has 62 MA's), (Start: 54 @40061 has 1 MA's), (Start: 87 @39986 has 221 MA's), (Start: 113 @39923 has 1 MA's), (115, 39920), (117, 39917), (138, 39863), (195, 39650), (214, 39584), (228, 39443),

Gene: Manad\_46 Start: 39912, Stop: 39277, Start Num: 54

Candidate Starts for Manad\_46:

(25, 40035), (47, 39930), (Start: 53 @39915 has 3 MA's), (Start: 54 @39912 has 1 MA's), (Start: 87 @39837 has 221 MA's), (Start: 113 @39768 has 1 MA's), (115, 39765), (117, 39762), (177, 39597), (195, 39495), (228, 39288),

Gene: Mangeria\_101 Start: 51872, Stop: 52504, Start Num: 86

Candidate Starts for Mangeria\_101:

(Start: 86 @51872 has 180 MA's), (188, 52211), (207, 52289), (223, 52397), (232, 52499),

Gene: Mariokart\_40 Start: 33941, Stop: 33252, Start Num: 44

Candidate Starts for Mariokart\_40:

(Start: 44 @33941 has 11 MA's), (97, 33797), (105, 33770), (127, 33692), (177, 33566), (195, 33464), (199, 33449), (213, 33401), (226, 33287),

Gene: Maru\_46 Start: 39929, Stop: 39375, Start Num: 87

Candidate Starts for Maru\_46:

(Start: 51 @40013 has 62 MA's), (Start: 53 @40007 has 3 MA's), (Start: 54 @40004 has 1 MA's), (Start: 87 @39929 has 221 MA's), (Start: 113 @39866 has 1 MA's), (115, 39863), (117, 39860), (138, 39806), (195, 39593), (214, 39527), (228, 39386),

Gene: Maskar\_47 Start: 40051, Stop: 39407, Start Num: 51

Candidate Starts for Maskar\_47:

(Start: 51 @40051 has 62 MA's), (Start: 53 @40045 has 3 MA's), (Start: 54 @40042 has 1 MA's), (Start: 87 @39967 has 221 MA's), (Start: 113 @39898 has 1 MA's), (115, 39895), (117, 39892), (138, 39838), (195, 39625),

Gene: MasterPo\_46 Start: 40702, Stop: 39938, Start Num: 22

Candidate Starts for MasterPo\_46:

(Start: 22 @40702 has 46 MA's), (37, 40660), (48, 40615), (78, 40558), (79, 40549), (80, 40546), (84, 40537), (108, 40450), (Start: 113 @40435 has 1 MA's), (145, 40351), (177, 40258), (186, 40207), (195, 40156), (208, 40117),

Gene: Matalotodo\_47 Start: 40281, Stop: 39721, Start Num: 87

Candidate Starts for Matalotodo\_47:

(Start: 51 @40365 has 62 MA's), (Start: 53 @40359 has 3 MA's), (Start: 54 @40356 has 1 MA's), (Start: 87 @40281 has 221 MA's), (Start: 113 @40212 has 1 MA's), (115, 40209), (117, 40206), (177, 40041), (195, 39939), (228, 39732),

Gene: Matsumoto\_99 Start: 50654, Stop: 51286, Start Num: 86

Candidate Starts for Matsumoto\_99:

(Start: 45 @50567 has 5 MA's), (Start: 86 @50654 has 180 MA's), (188, 50993), (207, 51071), (223, 51179), (232, 51281),

Gene: Maturis\_99 Start: 51445, Stop: 52077, Start Num: 86

Candidate Starts for Maturis\_99:

(Start: 86 @51445 has 180 MA's), (188, 51784), (207, 51862), (223, 51970), (232, 52072),

Gene: McGee\_103 Start: 50410, Stop: 51042, Start Num: 86

Candidate Starts for McGee\_103:

(Start: 86 @50410 has 180 MA's), (188, 50749), (207, 50827), (223, 50935), (232, 51037),

Gene: McWolfish\_99 Start: 51587, Stop: 52225, Start Num: 86

Candidate Starts for McWolfish\_99:

(Start: 86 @51587 has 180 MA's), (188, 51932), (207, 52010), (223, 52118), (232, 52220),

Gene: Mcshane\_46 Start: 40062, Stop: 39418, Start Num: 51

Candidate Starts for Mcshane\_46:

(Start: 51 @40062 has 62 MA's), (Start: 53 @40056 has 3 MA's), (Start: 54 @40053 has 1 MA's), (Start: 87 @39978 has 221 MA's), (Start: 113 @39909 has 1 MA's), (115, 39906), (117, 39903), (138, 39849), (195, 39636), (228, 39429),

Gene: Mecca\_46 Start: 39984, Stop: 39424, Start Num: 87

Candidate Starts for Mecca\_46:

(Start: 51 @40068 has 62 MA's), (Start: 53 @40062 has 3 MA's), (Start: 54 @40059 has 1 MA's), (Start: 87 @39984 has 221 MA's), (Start: 113 @39915 has 1 MA's), (115, 39912), (117, 39909), (138, 39855), (195, 39642), (228, 39435),

Gene: Megamind\_100 Start: 51470, Stop: 52108, Start Num: 86

Candidate Starts for Megamind\_100:

(Start: 86 @51470 has 180 MA's), (188, 51815), (207, 51893), (223, 52001), (232, 52103),

Gene: Megamind20\_47 Start: 40006, Stop: 39446, Start Num: 87

Candidate Starts for Megamind20\_47:

(Start: 51 @40090 has 62 MA's), (Start: 53 @40084 has 3 MA's), (Start: 54 @40081 has 1 MA's), (Start: 87 @40006 has 221 MA's), (Start: 113 @39937 has 1 MA's), (115, 39934), (117, 39931), (138, 39877), (195, 39664), (228, 39457),

Gene: Megatron\_48 Start: 40498, Stop: 39854, Start Num: 51

Candidate Starts for Megatron\_48:

(Start: 51 @40498 has 62 MA's), (Start: 53 @40492 has 3 MA's), (Start: 54 @40489 has 1 MA's), (Start: 87 @40414 has 221 MA's), (Start: 113 @40345 has 1 MA's), (115, 40342), (117, 40339), (138, 40285), (195, 40072),

Gene: Melc17\_47 Start: 40360, Stop: 39716, Start Num: 51

Candidate Starts for Melc17\_47:

(Start: 51 @40360 has 62 MA's), (Start: 53 @40354 has 3 MA's), (Start: 54 @40351 has 1 MA's), (Start: 87 @40276 has 221 MA's), (Start: 113 @40207 has 1 MA's), (115, 40204), (117, 40201), (138, 40147), (177, 40036), (195, 39934), (228, 39727),

Gene: Melpomini\_95 Start: 48945, Stop: 49577, Start Num: 86

Candidate Starts for Melpomini\_95:

(Start: 86 @48945 has 180 MA's), (188, 49284), (207, 49362), (223, 49470), (232, 49572),

Gene: MelsMeow\_47 Start: 40017, Stop: 39457, Start Num: 87

Candidate Starts for MelsMeow\_47:

(Start: 51 @40101 has 62 MA's), (Start: 53 @40095 has 3 MA's), (Start: 54 @40092 has 1 MA's),  
(Start: 87 @40017 has 221 MA's), (Start: 113 @39948 has 1 MA's), (115, 39945), (117, 39942), (138,  
39888), (195, 39675),

Gene: Merry\_ Start: 11517, Stop: 12002, Start Num: 116

Candidate Starts for Merry\_:

(Start: 116 @11517 has 2 MA's), (165, 11652), (175, 11685), (184, 11730), (194, 11772), (202, 11811),  
(214, 11850), (220, 11907), (223, 11925), (227, 11982),

Gene: Mesh1\_47 Start: 40293, Stop: 39733, Start Num: 87

Candidate Starts for Mesh1\_47:

(Start: 51 @40377 has 62 MA's), (Start: 53 @40371 has 3 MA's), (Start: 54 @40368 has 1 MA's),  
(Start: 87 @40293 has 221 MA's), (Start: 113 @40224 has 1 MA's), (115, 40221), (117, 40218), (177,  
40053), (195, 39951), (228, 39744),

Gene: Mesmerelda\_46 Start: 39988, Stop: 39434, Start Num: 87

Candidate Starts for Mesmerelda\_46:

(Start: 51 @40072 has 62 MA's), (Start: 53 @40066 has 3 MA's), (Start: 54 @40063 has 1 MA's),  
(Start: 87 @39988 has 221 MA's), (Start: 113 @39925 has 1 MA's), (115, 39922), (117, 39919), (138,  
39865), (195, 39652), (214, 39586), (228, 39445),

Gene: MichaelPhcott\_46 Start: 39883, Stop: 39323, Start Num: 87

Candidate Starts for MichaelPhcott\_46:

(Start: 51 @39967 has 62 MA's), (Start: 53 @39961 has 3 MA's), (Start: 54 @39958 has 1 MA's),  
(Start: 87 @39883 has 221 MA's), (115, 39811), (117, 39808), (138, 39754), (177, 39643), (195,  
39541), (228, 39334),

Gene: MikeLiesIn\_102 Start: 51817, Stop: 52455, Start Num: 86

Candidate Starts for MikeLiesIn\_102:

(Start: 86 @51817 has 180 MA's), (188, 52162), (207, 52240), (223, 52348), (232, 52450),

Gene: Mikota\_47 Start: 40263, Stop: 39703, Start Num: 87

Candidate Starts for Mikota\_47:

(Start: 74 @40305 has 3 MA's), (Start: 87 @40263 has 221 MA's), (Start: 113 @40194 has 1 MA's),  
(115, 40191), (117, 40188), (138, 40134), (195, 39921), (228, 39714),

Gene: Mikro\_99 Start: 53045, Stop: 53677, Start Num: 86

Candidate Starts for Mikro\_99:

(Start: 86 @53045 has 180 MA's), (188, 53384), (207, 53462), (223, 53570), (232, 53672),

Gene: MiniBoss\_47 Start: 40269, Stop: 39709, Start Num: 87

Candidate Starts for MiniBoss\_47:

(Start: 74 @40311 has 3 MA's), (Start: 87 @40269 has 221 MA's), (Start: 113 @40200 has 1 MA's),  
(115, 40197), (117, 40194), (195, 39927), (214, 39861), (228, 39720),

Gene: MitKao\_47 Start: 39984, Stop: 39424, Start Num: 87

Candidate Starts for MitKao\_47:

(Start: 51 @40068 has 62 MA's), (Start: 53 @40062 has 3 MA's), (Start: 54 @40059 has 1 MA's),  
(Start: 87 @39984 has 221 MA's), (Start: 113 @39915 has 1 MA's), (115, 39912), (117, 39909), (177,  
39744), (195, 39642), (228, 39435),

Gene: Mithril\_42 Start: 40442, Stop: 39708, Start Num: 29

Candidate Starts for Mithril\_42:

(Start: 29 @40442 has 26 MA's), (Start: 86 @40268 has 180 MA's), (97, 40238), (115, 40190), (120, 40178), (175, 40034), (177, 40028), (195, 39926), (210, 39881), (217, 39842), (227, 39734),

Gene: MoMoMixon\_102 Start: 51293, Stop: 51931, Start Num: 86

Candidate Starts for MoMoMixon\_102:

(Start: 86 @51293 has 180 MA's), (188, 51638), (207, 51716), (223, 51824), (232, 51926),

Gene: Moby\_92 Start: 47832, Stop: 48464, Start Num: 86

Candidate Starts for Moby\_92:

(Start: 86 @47832 has 180 MA's), (188, 48171), (207, 48249), (223, 48357), (232, 48459),

Gene: Moiqah\_92 Start: 47832, Stop: 48464, Start Num: 86

Candidate Starts for Moiqah\_92:

(Start: 86 @47832 has 180 MA's), (188, 48171), (207, 48249), (223, 48357), (232, 48459),

Gene: Momo\_100 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for Momo\_100:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (207, 50755), (223, 50863), (232, 50965),

Gene: Montpel\_100 Start: 52947, Stop: 53579, Start Num: 86

Candidate Starts for Montpel\_100:

(Start: 86 @52947 has 180 MA's), (188, 53286), (207, 53364), (223, 53472), (232, 53574),

Gene: Morgushi\_47 Start: 39985, Stop: 39425, Start Num: 87

Candidate Starts for Morgushi\_47:

(Start: 51 @40069 has 62 MA's), (Start: 53 @40063 has 3 MA's), (Start: 54 @40060 has 1 MA's), (Start: 87 @39985 has 221 MA's), (Start: 113 @39916 has 1 MA's), (115, 39913), (117, 39910), (138, 39856), (195, 39643), (214, 39577), (228, 39436),

Gene: Morizzled23\_101 Start: 50697, Stop: 51335, Start Num: 86

Candidate Starts for Morizzled23\_101:

(Start: 86 @50697 has 180 MA's), (188, 51042), (207, 51120), (223, 51228), (232, 51330),

Gene: Morty\_48 Start: 40423, Stop: 39863, Start Num: 87

Candidate Starts for Morty\_48:

(Start: 51 @40507 has 62 MA's), (Start: 53 @40501 has 3 MA's), (Start: 54 @40498 has 1 MA's), (Start: 87 @40423 has 221 MA's), (Start: 113 @40354 has 1 MA's), (115, 40351), (117, 40348), (138, 40294), (195, 40081),

Gene: Mosaic\_46 Start: 40062, Stop: 39418, Start Num: 51

Candidate Starts for Mosaic\_46:

(Start: 51 @40062 has 62 MA's), (Start: 53 @40056 has 3 MA's), (Start: 54 @40053 has 1 MA's), (Start: 87 @39978 has 221 MA's), (Start: 113 @39909 has 1 MA's), (115, 39906), (117, 39903), (177, 39738), (195, 39636), (228, 39429),

Gene: MossRose\_42 Start: 35851, Stop: 35276, Start Num: 83

Candidate Starts for MossRose\_42:

(Start: 83 @35851 has 11 MA's), (99, 35812), (140, 35701), (155, 35662), (184, 35539), (188, 35527), (190, 35518), (197, 35476), (199, 35473), (200, 35470), (203, 35461),

Gene: MrPhizzler\_47 Start: 39987, Stop: 39433, Start Num: 87

Candidate Starts for MrPhizzler\_47:

(Start: 51 @40071 has 62 MA's), (Start: 53 @40065 has 3 MA's), (Start: 54 @40062 has 1 MA's),  
(Start: 87 @39987 has 221 MA's), (Start: 113 @39924 has 1 MA's), (115, 39921), (117, 39918), (138,  
39864), (195, 39651), (214, 39585), (228, 39444),

Gene: Mudslide\_42 Start: 40698, Stop: 39940, Start Num: 29

Candidate Starts for Mudslide\_42:

(Start: 29 @40698 has 26 MA's), (41, 40629), (Start: 86 @40521 has 180 MA's), (97, 40491), (115,  
40443), (120, 40431), (139, 40386), (173, 40275), (177, 40260), (195, 40158), (210, 40113), (217,  
40074), (227, 39966),

Gene: Mulan\_47 Start: 40140, Stop: 39580, Start Num: 87

Candidate Starts for Mulan\_47:

(Start: 51 @40224 has 62 MA's), (Start: 53 @40218 has 3 MA's), (Start: 54 @40215 has 1 MA's),  
(Start: 87 @40140 has 221 MA's), (Start: 113 @40071 has 1 MA's), (115, 40068), (117, 40065), (138,  
40011), (195, 39798),

Gene: Murdoc\_47 Start: 40355, Stop: 39717, Start Num: 51

Candidate Starts for Murdoc\_47:

(Start: 51 @40355 has 62 MA's), (Start: 53 @40349 has 3 MA's), (Start: 54 @40346 has 1 MA's),  
(Start: 87 @40271 has 221 MA's), (Start: 113 @40208 has 1 MA's), (115, 40205), (117, 40202), (138,  
40148), (195, 39935), (214, 39869), (228, 39728),

Gene: Mutante\_46 Start: 39990, Stop: 39430, Start Num: 87

Candidate Starts for Mutante\_46:

(Start: 51 @40074 has 62 MA's), (Start: 53 @40068 has 3 MA's), (Start: 54 @40065 has 1 MA's),  
(Start: 87 @39990 has 221 MA's), (Start: 113 @39921 has 1 MA's), (115, 39918), (117, 39915), (138,  
39861), (195, 39648), (228, 39441),

Gene: Myrna\_229 Start: 133429, Stop: 134043, Start Num: 88

Candidate Starts for Myrna\_229:

(Start: 88 @133429 has 2 MA's), (103, 133477), (107, 133492), (125, 133555), (172, 133681), (188,  
133750), (207, 133828), (223, 133936),

Gene: Mysterious\_45 Start: 41019, Stop: 40390, Start Num: 70

Candidate Starts for Mysterious\_45:

(Start: 70 @41019 has 3 MA's), (95, 40938), (106, 40902), (117, 40875), (119, 40869), (144, 40806),  
(177, 40710), (195, 40608), (197, 40596),

Gene: NHagos\_40 Start: 34451, Stop: 33894, Start Num: 83

Candidate Starts for NHagos\_40:

(1, 34970), (6, 34805), (55, 34526), (Start: 70 @34490 has 3 MA's), (76, 34481), (Start: 83 @34451  
has 11 MA's), (107, 34388), (119, 34352), (141, 34301), (164, 34226), (190, 34136), (211, 34049),  
(227, 33914),

Gene: Nacho\_0048 Start: 40501, Stop: 39857, Start Num: 51

Candidate Starts for Nacho\_0048:

(Start: 51 @40501 has 62 MA's), (Start: 53 @40495 has 3 MA's), (Start: 54 @40492 has 1 MA's),  
(Start: 87 @40417 has 221 MA's), (Start: 113 @40348 has 1 MA's), (115, 40345), (117, 40342), (138,  
40288), (195, 40075),

Gene: Naija\_100 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for Naija\_100:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223, 50863), (232, 50965),

Gene: Nanao\_41 Start: 39394, Stop: 38666, Start Num: 29

Candidate Starts for Nanao\_41:

(Start: 29 @39394 has 26 MA's), (78, 39253), (84, 39232), (Start: 88 @39217 has 2 MA's), (126, 39112), (175, 38992), (177, 38986), (195, 38884), (210, 38839),

Gene: Nangang\_45 Start: 40967, Stop: 40182, Start Num: 26

Candidate Starts for Nangang\_45:

(4, 41147), (5, 41135), (6, 41129), (10, 41078), (Start: 26 @40967 has 8 MA's), (79, 40805), (Start: 88 @40778 has 2 MA's), (119, 40679), (145, 40604), (177, 40502), (195, 40400), (196, 40394), (199, 40385), (213, 40337),

Gene: Napoleon13\_97 Start: 49383, Stop: 50015, Start Num: 86

Candidate Starts for Napoleon13\_97:

(Start: 86 @49383 has 180 MA's), (188, 49722), (207, 49800), (223, 49908), (232, 50010),

Gene: Nappy\_104 Start: 52733, Stop: 53365, Start Num: 86

Candidate Starts for Nappy\_104:

(59, 52670), (Start: 86 @52733 has 180 MA's), (188, 53072), (207, 53150), (223, 53258), (232, 53360),

Gene: Nathan\_47 Start: 40315, Stop: 39755, Start Num: 87

Candidate Starts for Nathan\_47:

(Start: 51 @40399 has 62 MA's), (Start: 53 @40393 has 3 MA's), (Start: 54 @40390 has 1 MA's), (Start: 87 @40315 has 221 MA's), (Start: 113 @40246 has 1 MA's), (115, 40243), (117, 40240), (138, 40186), (195, 39973), (214, 39907), (228, 39766),

Gene: Naval22\_106 Start: 53313, Stop: 53945, Start Num: 86

Candidate Starts for Naval22\_106:

(Start: 86 @53313 has 180 MA's), (188, 53652), (207, 53730), (223, 53838), (232, 53940),

Gene: NedWong\_102 Start: 51804, Stop: 52442, Start Num: 86

Candidate Starts for NedWong\_102:

(Start: 86 @51804 has 180 MA's), (188, 52149), (207, 52227), (223, 52335), (232, 52437),

Gene: Nehemiah\_45 Start: 41019, Stop: 40390, Start Num: 70

Candidate Starts for Nehemiah\_45:

(Start: 70 @41019 has 3 MA's), (95, 40938), (106, 40902), (117, 40875), (119, 40869), (144, 40806), (177, 40710), (195, 40608), (197, 40596),

Gene: Newman\_47 Start: 40360, Stop: 39716, Start Num: 51

Candidate Starts for Newman\_47:

(Start: 51 @40360 has 62 MA's), (Start: 53 @40354 has 3 MA's), (Start: 54 @40351 has 1 MA's), (Start: 87 @40276 has 221 MA's), (Start: 113 @40207 has 1 MA's), (115, 40204), (117, 40201), (138, 40147), (177, 40036), (195, 39934), (228, 39727),

Gene: Ngannou\_97 Start: 49320, Stop: 49952, Start Num: 86

Candidate Starts for Ngannou\_97:

(Start: 45 @49233 has 5 MA's), (Start: 86 @49320 has 180 MA's), (188, 49659), (207, 49737), (223, 49845), (232, 49947),

Gene: NiaNia\_49 Start: 40007, Stop: 39453, Start Num: 87

Candidate Starts for NiaNia\_49:

(Start: 51 @40091 has 62 MA's), (Start: 53 @40085 has 3 MA's), (Start: 54 @40082 has 1 MA's), (Start: 87 @40007 has 221 MA's), (Start: 113 @39944 has 1 MA's), (115, 39941), (117, 39938), (138, 39884), (195, 39671), (214, 39605), (228, 39464),

Gene: Nicole21\_47 Start: 40277, Stop: 39717, Start Num: 87

Candidate Starts for Nicole21\_47:

(Start: 51 @40361 has 62 MA's), (Start: 53 @40355 has 3 MA's), (Start: 54 @40352 has 1 MA's), (Start: 87 @40277 has 221 MA's), (115, 40205), (117, 40202), (138, 40148), (177, 40037), (195, 39935), (228, 39728),

Gene: Nidhogg\_102 Start: 51544, Stop: 52176, Start Num: 86

Candidate Starts for Nidhogg\_102:

(Start: 86 @51544 has 180 MA's), (188, 51883), (207, 51961), (223, 52069), (232, 52171),

Gene: Nigel\_41 Start: 39313, Stop: 38579, Start Num: 29

Candidate Starts for Nigel\_41:

(Start: 29 @39313 has 26 MA's), (62, 39193), (78, 39166), (84, 39145), (85, 39142), (Start: 88 @39130 has 2 MA's), (98, 39106), (126, 39025), (175, 38905), (182, 38866), (195, 38797), (210, 38752),

Gene: NoodleTree\_108 Start: 52136, Stop: 52768, Start Num: 86

Candidate Starts for NoodleTree\_108:

(Start: 45 @52049 has 5 MA's), (Start: 86 @52136 has 180 MA's), (188, 52475), (207, 52553), (223, 52661), (232, 52763),

Gene: Norm\_102 Start: 52733, Stop: 53371, Start Num: 86

Candidate Starts for Norm\_102:

(Start: 86 @52733 has 180 MA's), (188, 53078), (207, 53156), (223, 53264), (232, 53366),

Gene: Nova1\_47 Start: 40014, Stop: 39370, Start Num: 51

Candidate Starts for Nova1\_47:

(Start: 51 @40014 has 62 MA's), (Start: 53 @40008 has 3 MA's), (Start: 54 @40005 has 1 MA's), (Start: 87 @39930 has 221 MA's), (Start: 113 @39861 has 1 MA's), (115, 39858), (117, 39855), (138, 39801), (195, 39588), (228, 39381),

Gene: NuevoMundo\_107 Start: 54087, Stop: 54719, Start Num: 86

Candidate Starts for NuevoMundo\_107:

(Start: 86 @54087 has 180 MA's), (188, 54426), (207, 54504), (223, 54612), (232, 54714),

Gene: Numberten\_47 Start: 40283, Stop: 39723, Start Num: 87

Candidate Starts for Numberten\_47:

(Start: 51 @40367 has 62 MA's), (Start: 53 @40361 has 3 MA's), (Start: 54 @40358 has 1 MA's), (Start: 87 @40283 has 221 MA's), (Start: 113 @40214 has 1 MA's), (115, 40211), (117, 40208), (138, 40154), (177, 40043), (195, 39941), (228, 39734),

Gene: Nyala\_46 Start: 40066, Stop: 39422, Start Num: 51

Candidate Starts for Nyala\_46:

(Start: 51 @40066 has 62 MA's), (Start: 53 @40060 has 3 MA's), (Start: 54 @40057 has 1 MA's), (Start: 87 @39982 has 221 MA's), (Start: 113 @39913 has 1 MA's), (115, 39910), (117, 39907), (177, 39742), (195, 39640), (228, 39433),

Gene: OSmaximus\_48 Start: 40540, Stop: 39896, Start Num: 51

Candidate Starts for OSmaximus\_48:

(Start: 51 @40540 has 62 MA's), (Start: 53 @40534 has 3 MA's), (Start: 54 @40531 has 1 MA's),  
(Start: 87 @40456 has 221 MA's), (Start: 113 @40387 has 1 MA's), (115, 40384), (117, 40381), (138,  
40327), (195, 40114),

Gene: Olak\_46 Start: 39985, Stop: 39425, Start Num: 87

Candidate Starts for Olak\_46:

(Start: 51 @40069 has 62 MA's), (Start: 53 @40063 has 3 MA's), (Start: 54 @40060 has 1 MA's),  
(Start: 87 @39985 has 221 MA's), (Start: 113 @39916 has 1 MA's), (115, 39913), (117, 39910), (195,  
39643), (228, 39436),

Gene: Oline\_46 Start: 39845, Stop: 39285, Start Num: 87

Candidate Starts for Oline\_46:

(Start: 51 @39929 has 62 MA's), (Start: 53 @39923 has 3 MA's), (Start: 54 @39920 has 1 MA's),  
(Start: 87 @39845 has 221 MA's), (Start: 113 @39776 has 1 MA's), (115, 39773), (117, 39770), (138,  
39716), (177, 39605), (195, 39503), (228, 39296),

Gene: Olive\_47 Start: 40356, Stop: 39712, Start Num: 51

Candidate Starts for Olive\_47:

(Start: 51 @40356 has 62 MA's), (Start: 53 @40350 has 3 MA's), (Start: 54 @40347 has 1 MA's),  
(Start: 87 @40272 has 221 MA's), (Start: 113 @40203 has 1 MA's), (115, 40200), (117, 40197), (138,  
40143), (195, 39930), (228, 39723),

Gene: OliverWalter\_47 Start: 40378, Stop: 39734, Start Num: 51

Candidate Starts for OliverWalter\_47:

(Start: 51 @40378 has 62 MA's), (Start: 53 @40372 has 3 MA's), (Start: 54 @40369 has 1 MA's),  
(Start: 87 @40294 has 221 MA's), (Start: 113 @40225 has 1 MA's), (115, 40222), (117, 40219), (138,  
40165), (195, 39952), (228, 39745),

Gene: Omniscient\_47 Start: 40291, Stop: 39731, Start Num: 87

Candidate Starts for Omniscient\_47:

(Start: 51 @40375 has 62 MA's), (Start: 53 @40369 has 3 MA's), (Start: 54 @40366 has 1 MA's),  
(Start: 87 @40291 has 221 MA's), (Start: 113 @40222 has 1 MA's), (115, 40219), (117, 40216), (138,  
40162), (195, 39949), (228, 39742),

Gene: OneBrain\_48 Start: 39984, Stop: 39424, Start Num: 87

Candidate Starts for OneBrain\_48:

(Start: 51 @40068 has 62 MA's), (Start: 53 @40062 has 3 MA's), (Start: 54 @40059 has 1 MA's),  
(Start: 87 @39984 has 221 MA's), (Start: 113 @39915 has 1 MA's), (115, 39912), (117, 39909), (138,  
39855), (195, 39642), (228, 39435),

Gene: Oosterbaan\_47 Start: 40363, Stop: 39719, Start Num: 51

Candidate Starts for Oosterbaan\_47:

(Start: 51 @40363 has 62 MA's), (Start: 53 @40357 has 3 MA's), (Start: 54 @40354 has 1 MA's),  
(Start: 87 @40279 has 221 MA's), (Start: 113 @40210 has 1 MA's), (115, 40207), (117, 40204), (177,  
40039), (195, 39937), (228, 39730),

Gene: Opia\_46 Start: 40688, Stop: 39924, Start Num: 22

Candidate Starts for Opia\_46:

(Start: 22 @40688 has 46 MA's), (48, 40601), (78, 40544), (79, 40535), (80, 40532), (84, 40523), (108,  
40436), (Start: 113 @40421 has 1 MA's), (145, 40337), (177, 40244), (186, 40193), (195, 40142), (208,  
40103),

Gene: OrediggerDelux\_99 Start: 52340, Stop: 52972, Start Num: 86

Candidate Starts for OrediggerDelux\_99:

(Start: 86 @52340 has 180 MA's), (188, 52679), (207, 52757), (223, 52865), (232, 52967),

Gene: Orfeu\_46 Start: 39978, Stop: 39424, Start Num: 87

Candidate Starts for Orfeu\_46:

(Start: 51 @40062 has 62 MA's), (Start: 53 @40056 has 3 MA's), (Start: 54 @40053 has 1 MA's),  
(Start: 87 @39978 has 221 MA's), (Start: 113 @39915 has 1 MA's), (115, 39912), (117, 39909), (138,  
39855), (195, 39642), (214, 39576), (228, 39435),

Gene: Orion\_48 Start: 40412, Stop: 39852, Start Num: 87

Candidate Starts for Orion\_48:

(Start: 51 @40496 has 62 MA's), (Start: 53 @40490 has 3 MA's), (Start: 54 @40487 has 1 MA's),  
(Start: 87 @40412 has 221 MA's), (Start: 113 @40343 has 1 MA's), (115, 40340), (117, 40337), (138,  
40283), (195, 40070),

Gene: Orwigg\_46 Start: 39978, Stop: 39418, Start Num: 87

Candidate Starts for Orwigg\_46:

(Start: 51 @40062 has 62 MA's), (Start: 53 @40056 has 3 MA's), (Start: 54 @40053 has 1 MA's),  
(Start: 87 @39978 has 221 MA's), (Start: 113 @39909 has 1 MA's), (115, 39906), (117, 39903), (138,  
39849), (177, 39738), (195, 39636), (228, 39429),

Gene: PG1\_48 Start: 40425, Stop: 39865, Start Num: 87

Candidate Starts for PG1\_48:

(Start: 51 @40509 has 62 MA's), (Start: 53 @40503 has 3 MA's), (Start: 54 @40500 has 1 MA's),  
(Start: 87 @40425 has 221 MA's), (Start: 113 @40356 has 1 MA's), (115, 40353), (117, 40350), (138,  
40296), (195, 40083),

Gene: Pacifista\_46 Start: 39981, Stop: 39421, Start Num: 87

Candidate Starts for Pacifista\_46:

(Start: 51 @40065 has 62 MA's), (Start: 53 @40059 has 3 MA's), (Start: 54 @40056 has 1 MA's),  
(Start: 87 @39981 has 221 MA's), (Start: 113 @39912 has 1 MA's), (115, 39909), (117, 39906), (177,  
39741), (195, 39639), (228, 39432),

Gene: PallasAthena\_47 Start: 39989, Stop: 39429, Start Num: 87

Candidate Starts for PallasAthena\_47:

(Start: 51 @40073 has 62 MA's), (Start: 53 @40067 has 3 MA's), (Start: 54 @40064 has 1 MA's),  
(Start: 87 @39989 has 221 MA's), (Start: 113 @39920 has 1 MA's), (115, 39917), (117, 39914), (138,  
39860), (195, 39647), (228, 39440),

Gene: ParkTD\_102 Start: 51800, Stop: 52438, Start Num: 86

Candidate Starts for ParkTD\_102:

(Start: 86 @51800 has 180 MA's), (188, 52145), (207, 52223), (223, 52331), (232, 52433),

Gene: Patter\_101 Start: 50355, Stop: 50987, Start Num: 86

Candidate Starts for Patter\_101:

(Start: 45 @50268 has 5 MA's), (Start: 86 @50355 has 180 MA's), (188, 50694), (207, 50772), (223,  
50880), (232, 50982),

Gene: PenguinLover67\_48 Start: 42106, Stop: 41504, Start Num: 82

Candidate Starts for PenguinLover67\_48:

(Start: 82 @42106 has 3 MA's), (115, 42019), (190, 41758), (195, 41722), (199, 41707), (208, 41683),  
(217, 41638), (224, 41584),

Gene: Phabba\_239 Start: 133129, Stop: 133758, Start Num: 88

Candidate Starts for Phabba\_239:

(Start: 88 @133129 has 2 MA's), (103, 133177), (168, 133381), (179, 133426), (182, 133447), (188, 133465), (192, 133486), (193, 133492), (198, 133522), (205, 133540), (229, 133735), (230, 133738), (231, 133750),

Gene: Phamished\_48 Start: 40420, Stop: 39860, Start Num: 87

Candidate Starts for Phamished\_48:

(Start: 51 @40504 has 62 MA's), (Start: 53 @40498 has 3 MA's), (Start: 54 @40495 has 1 MA's), (Start: 87 @40420 has 221 MA's), (Start: 113 @40351 has 1 MA's), (115, 40348), (117, 40345), (138, 40291), (195, 40078),

Gene: Phantasmagoria\_46 Start: 40700, Stop: 39936, Start Num: 22

Candidate Starts for Phantasmagoria\_46:

(Start: 22 @40700 has 46 MA's), (37, 40658), (48, 40613), (78, 40556), (79, 40547), (80, 40544), (84, 40535), (108, 40448), (Start: 113 @40433 has 1 MA's), (145, 40349), (177, 40256), (186, 40205), (195, 40154), (208, 40115),

Gene: Phareon\_47 Start: 39980, Stop: 39426, Start Num: 87

Candidate Starts for Phareon\_47:

(Start: 51 @40064 has 62 MA's), (Start: 53 @40058 has 3 MA's), (Start: 54 @40055 has 1 MA's), (Start: 87 @39980 has 221 MA's), (Start: 113 @39917 has 1 MA's), (115, 39914), (117, 39911), (138, 39857), (195, 39644), (214, 39578), (228, 39437),

Gene: PharkleMinkus\_105 Start: 52378, Stop: 53010, Start Num: 86

Candidate Starts for PharkleMinkus\_105:

(Start: 45 @52291 has 5 MA's), (Start: 86 @52378 has 180 MA's), (188, 52717), (207, 52795), (223, 52903), (232, 53005),

Gene: PhatCats2014\_48 Start: 40429, Stop: 39869, Start Num: 87

Candidate Starts for PhatCats2014\_48:

(Start: 51 @40513 has 62 MA's), (Start: 53 @40507 has 3 MA's), (Start: 54 @40504 has 1 MA's), (Start: 87 @40429 has 221 MA's), (Start: 113 @40360 has 1 MA's), (115, 40357), (117, 40354), (138, 40300), (195, 40087),

Gene: PhatLouie\_47 Start: 40283, Stop: 39723, Start Num: 87

Candidate Starts for PhatLouie\_47:

(Start: 51 @40367 has 62 MA's), (Start: 53 @40361 has 3 MA's), (Start: 54 @40358 has 1 MA's), (Start: 87 @40283 has 221 MA's), (Start: 113 @40214 has 1 MA's), (115, 40211), (117, 40208), (177, 40043), (195, 39941), (228, 39734),

Gene: Phelemich\_45 Start: 41018, Stop: 40389, Start Num: 70

Candidate Starts for Phelemich\_45:

(Start: 70 @41018 has 3 MA's), (95, 40937), (106, 40901), (117, 40874), (119, 40868), (144, 40805), (177, 40709), (195, 40607), (197, 40595),

Gene: PhenghisKhan\_46 Start: 39973, Stop: 39329, Start Num: 51

Candidate Starts for PhenghisKhan\_46:

(Start: 51 @39973 has 62 MA's), (Start: 53 @39967 has 3 MA's), (Start: 54 @39964 has 1 MA's), (Start: 87 @39889 has 221 MA's), (Start: 113 @39820 has 1 MA's), (115, 39817), (117, 39814), (138, 39760), (195, 39547), (228, 39340),

Gene: Pherdinand\_48 Start: 40420, Stop: 39860, Start Num: 87

Candidate Starts for Pherdinand\_48:

(Start: 51 @40504 has 62 MA's), (Start: 53 @40498 has 3 MA's), (Start: 54 @40495 has 1 MA's),  
(Start: 87 @40420 has 221 MA's), (Start: 113 @40351 has 1 MA's), (115, 40348), (117, 40345), (138,  
40291), (195, 40078),

Gene: Phergie\_46 Start: 39964, Stop: 39320, Start Num: 51

Candidate Starts for Phergie\_46:

(Start: 51 @39964 has 62 MA's), (Start: 53 @39958 has 3 MA's), (Start: 54 @39955 has 1 MA's),  
(Start: 87 @39880 has 221 MA's), (Start: 113 @39811 has 1 MA's), (115, 39808), (117, 39805), (138,  
39751), (195, 39538), (228, 39331),

Gene: Phlegm\_103 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for Phlegm\_103:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223,  
50863), (232, 50965),

Gene: Phleuron\_46 Start: 39970, Stop: 39326, Start Num: 51

Candidate Starts for Phleuron\_46:

(Start: 51 @39970 has 62 MA's), (Start: 53 @39964 has 3 MA's), (Start: 54 @39961 has 1 MA's),  
(Start: 87 @39886 has 221 MA's), (115, 39814), (117, 39811), (138, 39757), (177, 39646), (195,  
39544), (228, 39337),

Gene: Phox\_98 Start: 52086, Stop: 52718, Start Num: 86

Candidate Starts for Phox\_98:

(Start: 86 @52086 has 180 MA's), (188, 52425), (207, 52503), (223, 52611), (232, 52713),

Gene: PhrankReynolds\_45 Start: 39970, Stop: 39326, Start Num: 51

Candidate Starts for PhrankReynolds\_45:

(Start: 51 @39970 has 62 MA's), (Start: 53 @39964 has 3 MA's), (Start: 54 @39961 has 1 MA's),  
(Start: 87 @39886 has 221 MA's), (Start: 113 @39817 has 1 MA's), (115, 39814), (117, 39811), (138,  
39757), (195, 39544), (228, 39337),

Gene: PhrodoBaggins\_47 Start: 40408, Stop: 39848, Start Num: 87

Candidate Starts for PhrodoBaggins\_47:

(Start: 51 @40492 has 62 MA's), (Start: 53 @40486 has 3 MA's), (Start: 54 @40483 has 1 MA's),  
(Start: 87 @40408 has 221 MA's), (Start: 113 @40339 has 1 MA's), (115, 40336), (117, 40333), (138,  
40279), (195, 40066),

Gene: Phunky\_47 Start: 40277, Stop: 39723, Start Num: 87

Candidate Starts for Phunky\_47:

(Start: 51 @40361 has 62 MA's), (Start: 53 @40355 has 3 MA's), (Start: 54 @40352 has 1 MA's),  
(Start: 87 @40277 has 221 MA's), (Start: 113 @40214 has 1 MA's), (115, 40211), (117, 40208), (138,  
40154), (195, 39941), (228, 39734),

Gene: Phusco\_101 Start: 51103, Stop: 51735, Start Num: 86

Candidate Starts for Phusco\_101:

(Start: 45 @51016 has 5 MA's), (Start: 86 @51103 has 180 MA's), (188, 51442), (207, 51520), (223,  
51628), (232, 51730),

Gene: Pier\_105 Start: 52448, Stop: 53080, Start Num: 86

Candidate Starts for Pier\_105:

(Start: 86 @52448 has 180 MA's), (188, 52787), (207, 52865), (223, 52973), (232, 53075),

Gene: Piglet\_0046 Start: 40390, Stop: 39830, Start Num: 87

Candidate Starts for Piglet\_0046:

(Start: 51 @40474 has 62 MA's), (Start: 53 @40468 has 3 MA's), (Start: 54 @40465 has 1 MA's),  
(Start: 87 @40390 has 221 MA's), (Start: 113 @40321 has 1 MA's), (115, 40318), (117, 40315), (138,  
40261), (177, 40150), (195, 40048), (228, 39841),

Gene: PinheadLarry\_47 Start: 39990, Stop: 39436, Start Num: 87

Candidate Starts for PinheadLarry\_47:

(Start: 51 @40074 has 62 MA's), (Start: 53 @40068 has 3 MA's), (Start: 54 @40065 has 1 MA's),  
(Start: 87 @39990 has 221 MA's), (Start: 113 @39927 has 1 MA's), (115, 39924), (117, 39921), (138,  
39867), (195, 39654), (214, 39588), (228, 39447),

Gene: Pinkcreek\_92 Start: 48897, Stop: 49529, Start Num: 86

Candidate Starts for Pinkcreek\_92:

(Start: 86 @48897 has 180 MA's), (188, 49236), (207, 49314), (223, 49422), (232, 49524),

Gene: Pinkman\_46 Start: 39839, Stop: 39279, Start Num: 87

Candidate Starts for Pinkman\_46:

(Start: 51 @39923 has 62 MA's), (Start: 53 @39917 has 3 MA's), (Start: 54 @39914 has 1 MA's),  
(Start: 87 @39839 has 221 MA's), (Start: 113 @39770 has 1 MA's), (115, 39767), (117, 39764), (177,  
39599), (195, 39497), (228, 39290),

Gene: Pio\_105 Start: 53696, Stop: 54328, Start Num: 86

Candidate Starts for Pio\_105:

(Start: 86 @53696 has 180 MA's), (188, 54035), (207, 54113), (223, 54221), (232, 54323),

Gene: Pipsqueak\_47 Start: 40368, Stop: 39724, Start Num: 51

Candidate Starts for Pipsqueak\_47:

(Start: 51 @40368 has 62 MA's), (Start: 53 @40362 has 3 MA's), (Start: 54 @40359 has 1 MA's),  
(Start: 87 @40284 has 221 MA's), (Start: 113 @40215 has 1 MA's), (115, 40212), (117, 40209), (138,  
40155), (195, 39942), (228, 39735),

Gene: Pivoine\_100 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for Pivoine\_100:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223,  
50863), (232, 50965),

Gene: Placalicious\_46 Start: 39977, Stop: 39417, Start Num: 87

Candidate Starts for Placalicious\_46:

(Start: 51 @40061 has 62 MA's), (Start: 53 @40055 has 3 MA's), (Start: 54 @40052 has 1 MA's),  
(Start: 87 @39977 has 221 MA's), (Start: 113 @39908 has 1 MA's), (115, 39905), (117, 39902), (177,  
39737), (195, 39635), (228, 39428),

Gene: Plata\_46 Start: 39995, Stop: 39435, Start Num: 87

Candidate Starts for Plata\_46:

(Start: 51 @40079 has 62 MA's), (Start: 53 @40073 has 3 MA's), (Start: 54 @40070 has 1 MA's),  
(Start: 87 @39995 has 221 MA's), (Start: 113 @39926 has 1 MA's), (115, 39923), (117, 39920), (138,  
39866), (195, 39653), (228, 39446),

Gene: Pleione\_104 Start: 51973, Stop: 52605, Start Num: 86

Candidate Starts for Pleione\_104:

(Start: 86 @51973 has 180 MA's), (188, 52312), (207, 52390), (223, 52498), (232, 52600),

Gene: Plmatters\_47 Start: 40280, Stop: 39720, Start Num: 87

Candidate Starts for Plmatters\_47:

(Start: 51 @40364 has 62 MA's), (Start: 53 @40358 has 3 MA's), (Start: 54 @40355 has 1 MA's),  
(Start: 87 @40280 has 221 MA's), (Start: 113 @40211 has 1 MA's), (115, 40208), (117, 40205), (138,  
40151), (177, 40040), (195, 39938), (228, 39731),

Gene: Podrick\_47 Start: 40271, Stop: 39711, Start Num: 87

Candidate Starts for Podrick\_47:

(Start: 51 @40355 has 62 MA's), (Start: 53 @40349 has 3 MA's), (Start: 54 @40346 has 1 MA's),  
(Start: 87 @40271 has 221 MA's), (Start: 113 @40202 has 1 MA's), (115, 40199), (117, 40196), (138,  
40142), (177, 40031), (195, 39929), (228, 39722),

Gene: Pops\_47 Start: 40295, Stop: 39735, Start Num: 87

Candidate Starts for Pops\_47:

(Start: 51 @40379 has 62 MA's), (Start: 53 @40373 has 3 MA's), (Start: 54 @40370 has 1 MA's),  
(Start: 87 @40295 has 221 MA's), (Start: 113 @40226 has 1 MA's), (115, 40223), (117, 40220), (138,  
40166), (177, 40055), (195, 39953), (228, 39746),

Gene: Poster\_41 Start: 39395, Stop: 38667, Start Num: 29

Candidate Starts for Poster\_41:

(Start: 29 @39395 has 26 MA's), (78, 39254), (84, 39233), (Start: 88 @39218 has 2 MA's), (126,  
39113), (175, 38993), (177, 38987), (195, 38885), (210, 38840),

Gene: Potter\_46 Start: 39995, Stop: 39435, Start Num: 87

Candidate Starts for Potter\_46:

(Start: 51 @40079 has 62 MA's), (Start: 53 @40073 has 3 MA's), (Start: 54 @40070 has 1 MA's),  
(Start: 87 @39995 has 221 MA's), (Start: 113 @39926 has 1 MA's), (115, 39923), (117, 39920), (177,  
39755), (195, 39653), (228, 39446),

Gene: Prickles\_47 Start: 40271, Stop: 39711, Start Num: 87

Candidate Starts for Prickles\_47:

(Start: 51 @40355 has 62 MA's), (Start: 53 @40349 has 3 MA's), (Start: 54 @40346 has 1 MA's),  
(Start: 87 @40271 has 221 MA's), (Start: 113 @40202 has 1 MA's), (115, 40199), (117, 40196), (138,  
40142), (195, 39929), (228, 39722),

Gene: Primadonna\_95 Start: 50702, Stop: 51334, Start Num: 86

Candidate Starts for Primadonna\_95:

(Start: 86 @50702 has 180 MA's), (188, 51041), (207, 51119), (223, 51227), (232, 51329),

Gene: Prince\_42 Start: 40608, Stop: 39850, Start Num: 29

Candidate Starts for Prince\_42:

(Start: 29 @40608 has 26 MA's), (41, 40539), (Start: 86 @40431 has 180 MA's), (97, 40401), (115,  
40353), (120, 40341), (139, 40296), (173, 40185), (177, 40170), (195, 40068), (210, 40023), (214,  
40002), (217, 39984), (227, 39876),

Gene: PrinceCharming\_46 Start: 40808, Stop: 40044, Start Num: 22

Candidate Starts for PrinceCharming\_46:

(Start: 22 @40808 has 46 MA's), (37, 40766), (48, 40721), (78, 40664), (79, 40655), (80, 40652), (84,  
40643), (106, 40562), (108, 40556), (Start: 113 @40541 has 1 MA's), (145, 40457), (177, 40364), (186,  
40313), (195, 40262), (208, 40223),

Gene: ProfessorX\_47 Start: 40272, Stop: 39712, Start Num: 87

Candidate Starts for ProfessorX\_47:

(Start: 51 @40356 has 62 MA's), (Start: 53 @40350 has 3 MA's), (Start: 54 @40347 has 1 MA's),  
(Start: 87 @40272 has 221 MA's), (Start: 113 @40203 has 1 MA's), (115, 40200), (117, 40197), (138,  
40143), (195, 39930), (228, 39723),

Gene: Puhltonio\_47 Start: 40365, Stop: 39727, Start Num: 51

Candidate Starts for Puhltonio\_47:

(Start: 51 @40365 has 62 MA's), (Start: 53 @40359 has 3 MA's), (Start: 54 @40356 has 1 MA's),  
(Start: 87 @40281 has 221 MA's), (Start: 113 @40218 has 1 MA's), (115, 40215), (117, 40212), (138,  
40158), (195, 39945), (214, 39879), (228, 39738),

Gene: Pupper\_52 Start: 17408, Stop: 18166, Start Num: 42

Candidate Starts for Pupper\_52:

(Start: 42 @17408 has 3 MA's), (149, 17729), (193, 17909), (205, 17957), (215, 18005),

Gene: Puppies\_48 Start: 36822, Stop: 36238, Start Num: 86

Candidate Starts for Puppies\_48:

(81, 36834), (Start: 86 @36822 has 180 MA's), (Start: 88 @36813 has 2 MA's), (Start: 121 @36717  
has 1 MA's), (158, 36612), (162, 36591), (170, 36561), (227, 36258),

Gene: Pupusa\_107 Start: 53185, Stop: 53817, Start Num: 86

Candidate Starts for Pupusa\_107:

(Start: 45 @53098 has 5 MA's), (Start: 86 @53185 has 180 MA's), (188, 53524), (207, 53602), (223,  
53710), (232, 53812),

Gene: PurduePete\_101 Start: 52225, Stop: 52863, Start Num: 86

Candidate Starts for PurduePete\_101:

(Start: 86 @52225 has 180 MA's), (188, 52570), (207, 52648), (223, 52756), (232, 52858),

Gene: QBert\_95 Start: 50881, Stop: 51513, Start Num: 86

Candidate Starts for QBert\_95:

(Start: 86 @50881 has 180 MA's), (188, 51220), (207, 51298), (223, 51406), (232, 51508),

Gene: Quasimodo\_102 Start: 51762, Stop: 52394, Start Num: 86

Candidate Starts for Quasimodo\_102:

(Start: 86 @51762 has 180 MA's), (188, 52101), (207, 52179), (223, 52287), (232, 52389),

Gene: QueenBeane\_47 Start: 40271, Stop: 39717, Start Num: 87

Candidate Starts for QueenBeane\_47:

(Start: 51 @40355 has 62 MA's), (Start: 53 @40349 has 3 MA's), (Start: 54 @40346 has 1 MA's),  
(Start: 87 @40271 has 221 MA's), (Start: 113 @40208 has 1 MA's), (115, 40205), (117, 40202), (138,  
40148), (195, 39935), (214, 39869), (228, 39728),

Gene: QueenPie\_41 Start: 40519, Stop: 39791, Start Num: 29

Candidate Starts for QueenPie\_41:

(Start: 29 @40519 has 26 MA's), (78, 40378), (84, 40357), (Start: 88 @40342 has 2 MA's), (126,  
40237), (154, 40171), (175, 40117), (177, 40111), (195, 40009), (210, 39964), (217, 39925),

Gene: Quesadilla\_48 Start: 42077, Stop: 41490, Start Num: 82

Candidate Starts for Quesadilla\_48:

(Start: 82 @42077 has 3 MA's), (115, 41996), (117, 41993), (132, 41948), (190, 41744), (195, 41708),  
(199, 41693), (208, 41669),

Gene: Quisquilliae\_47 Start: 40308, Stop: 39748, Start Num: 87

Candidate Starts for Quisquilliae\_47:

(Start: 51 @40392 has 62 MA's), (Start: 53 @40386 has 3 MA's), (Start: 54 @40383 has 1 MA's),  
(Start: 87 @40308 has 221 MA's), (Start: 113 @40239 has 1 MA's), (115, 40236), (117, 40233), (138,  
40179), (177, 40068), (195, 39966), (228, 39759),

Gene: Qyrzula\_43 Start: 40579, Stop: 40082, Start Num: 113

Candidate Starts for Qyrzula\_43:

(Start: 113 @40579 has 1 MA's), (145, 40495), (177, 40402), (186, 40351), (195, 40300), (208, 40261),

Gene: Rabinovish\_99 Start: 51861, Stop: 52493, Start Num: 86

Candidate Starts for Rabinovish\_99:

(Start: 86 @51861 has 180 MA's), (188, 52200), (207, 52278), (223, 52386), (232, 52488),

Gene: Rahel\_100 Start: 50695, Stop: 51327, Start Num: 86

Candidate Starts for Rahel\_100:

(Start: 45 @50608 has 5 MA's), (Start: 86 @50695 has 180 MA's), (188, 51034), (207, 51112), (223,  
51220), (232, 51322),

Gene: RawrgerThat\_43 Start: 40453, Stop: 39695, Start Num: 29

Candidate Starts for RawrgerThat\_43:

(Start: 29 @40453 has 26 MA's), (41, 40384), (Start: 86 @40276 has 180 MA's), (97, 40246), (115,  
40198), (120, 40186), (139, 40141), (173, 40030), (177, 40015), (195, 39913), (210, 39868), (217,  
39829), (227, 39721),

Gene: Reccee\_46 Start: 41085, Stop: 40300, Start Num: 26

Candidate Starts for Reccee\_46:

(Start: 26 @41085 has 8 MA's), (48, 40998), (79, 40923), (Start: 88 @40896 has 2 MA's), (119, 40797),  
(195, 40518), (199, 40503),

Gene: RedMaple\_47 Start: 40422, Stop: 39862, Start Num: 87

Candidate Starts for RedMaple\_47:

(Start: 51 @40506 has 62 MA's), (Start: 53 @40500 has 3 MA's), (Start: 54 @40497 has 1 MA's),  
(Start: 87 @40422 has 221 MA's), (Start: 113 @40353 has 1 MA's), (115, 40350), (117, 40347), (138,  
40293), (195, 40080),

Gene: RedRaider89\_48 Start: 40504, Stop: 39944, Start Num: 87

Candidate Starts for RedRaider89\_48:

(Start: 74 @40546 has 3 MA's), (Start: 87 @40504 has 221 MA's), (Start: 113 @40435 has 1 MA's),  
(115, 40432), (117, 40429), (138, 40375), (195, 40162), (214, 40096), (228, 39955),

Gene: RedWattleHog\_178 Start: 112519, Stop: 113199, Start Num: 50

Candidate Starts for RedWattleHog\_178:

(Start: 50 @112519 has 2 MA's), (95, 112642), (127, 112747), (153, 112819), (189, 112945), (213,  
113047),

Gene: Renkei\_41 Start: 39429, Stop: 38701, Start Num: 29

Candidate Starts for Renkei\_41:

(Start: 29 @39429 has 26 MA's), (78, 39288), (84, 39267), (Start: 88 @39252 has 2 MA's), (126,  
39147), (175, 39027), (177, 39021), (195, 38919), (210, 38874),

Gene: Reprobate\_46 Start: 41023, Stop: 40394, Start Num: 70

Candidate Starts for Reprobate\_46:

(Start: 70 @41023 has 3 MA's), (95, 40942), (106, 40906), (117, 40879), (119, 40873), (144, 40810), (177, 40714), (195, 40612), (197, 40600),

Gene: Rhinoforte\_46 Start: 40821, Stop: 40045, Start Num: 22

Candidate Starts for Rhinoforte\_46:

(Start: 22 @40821 has 46 MA's), (37, 40767), (48, 40722), (78, 40665), (79, 40656), (80, 40653), (84, 40644), (108, 40557), (Start: 113 @40542 has 1 MA's), (145, 40458), (177, 40365), (186, 40314), (195, 40263), (208, 40224),

Gene: Rich\_44 Start: 40775, Stop: 39990, Start Num: 26

Candidate Starts for Rich\_44:

(Start: 26 @40775 has 8 MA's), (64, 40652), (79, 40613), (Start: 88 @40586 has 2 MA's), (119, 40487), (145, 40412), (163, 40361), (177, 40310), (195, 40208), (196, 40202), (199, 40193),

Gene: Ricotta\_46 Start: 39994, Stop: 39440, Start Num: 87

Candidate Starts for Ricotta\_46:

(Start: 51 @40078 has 62 MA's), (Start: 53 @40072 has 3 MA's), (Start: 54 @40069 has 1 MA's), (Start: 87 @39994 has 221 MA's), (Start: 113 @39931 has 1 MA's), (115, 39928), (117, 39925), (138, 39871), (195, 39658), (214, 39592), (228, 39451),

Gene: Riggan\_47 Start: 40267, Stop: 39707, Start Num: 87

Candidate Starts for Riggan\_47:

(Start: 51 @40351 has 62 MA's), (Start: 53 @40345 has 3 MA's), (Start: 54 @40342 has 1 MA's), (Start: 87 @40267 has 221 MA's), (Start: 113 @40198 has 1 MA's), (115, 40195), (117, 40192), (138, 40138), (195, 39925), (228, 39718),

Gene: Rimu\_47 Start: 40007, Stop: 39453, Start Num: 87

Candidate Starts for Rimu\_47:

(Start: 51 @40091 has 62 MA's), (Start: 53 @40085 has 3 MA's), (Start: 54 @40082 has 1 MA's), (Start: 87 @40007 has 221 MA's), (Start: 113 @39944 has 1 MA's), (115, 39941), (117, 39938), (138, 39884), (195, 39671), (214, 39605), (228, 39464),

Gene: Rinke\_46 Start: 41695, Stop: 40898, Start Num: 17

Candidate Starts for Rinke\_46:

(Start: 17 @41695 has 1 MA's), (21, 41677), (Start: 22 @41665 has 46 MA's), (78, 41509), (Start: 88 @41473 has 2 MA's), (119, 41374), (190, 41152), (195, 41116), (200, 41098), (208, 41077), (224, 40978),

Gene: Rita130\_46 Start: 40905, Stop: 40120, Start Num: 26

Candidate Starts for Rita130\_46:

(Start: 26 @40905 has 8 MA's), (48, 40818), (79, 40743), (Start: 88 @40716 has 2 MA's), (119, 40617), (195, 40338), (199, 40323),

Gene: Riverton\_47 Start: 40369, Stop: 39725, Start Num: 51

Candidate Starts for Riverton\_47:

(Start: 51 @40369 has 62 MA's), (Start: 53 @40363 has 3 MA's), (Start: 54 @40360 has 1 MA's), (Start: 87 @40285 has 221 MA's), (Start: 113 @40216 has 1 MA's), (115, 40213), (117, 40210), (138, 40156), (177, 40045), (195, 39943), (228, 39736),

Gene: Rizal\_97 Start: 49756, Stop: 50475, Start Num: 45

Candidate Starts for Rizal\_97:

(Start: 45 @49756 has 5 MA's), (Start: 86 @49843 has 180 MA's), (188, 50182), (207, 50260), (223, 50368), (232, 50470),

Gene: RoMag\_96 Start: 51018, Stop: 51650, Start Num: 86

Candidate Starts for RoMag\_96:

(65, 50976), (67, 50979), (Start: 86 @51018 has 180 MA's), (188, 51357), (207, 51435), (223, 51543), (232, 51645),

Gene: Robyn\_46 Start: 39851, Stop: 39291, Start Num: 87

Candidate Starts for Robyn\_46:

(Start: 51 @39935 has 62 MA's), (Start: 53 @39929 has 3 MA's), (Start: 54 @39926 has 1 MA's), (Start: 87 @39851 has 221 MA's), (Start: 113 @39782 has 1 MA's), (115, 39779), (117, 39776), (177, 39611), (195, 39509), (228, 39302),

Gene: Rocha\_100 Start: 51272, Stop: 51904, Start Num: 86

Candidate Starts for Rocha\_100:

(Start: 86 @51272 has 180 MA's), (188, 51611), (207, 51689), (223, 51797), (232, 51899),

Gene: Roliet\_47 Start: 40279, Stop: 39719, Start Num: 87

Candidate Starts for Roliet\_47:

(Start: 74 @40321 has 3 MA's), (Start: 87 @40279 has 221 MA's), (Start: 113 @40210 has 1 MA's), (115, 40207), (117, 40204), (138, 40150), (195, 39937), (228, 39730),

Gene: Ronan\_95 Start: 48969, Stop: 49601, Start Num: 86

Candidate Starts for Ronan\_95:

(Start: 86 @48969 has 180 MA's), (188, 49308), (207, 49386), (223, 49494), (232, 49596),

Gene: Roots515\_100 Start: 51997, Stop: 52635, Start Num: 86

Candidate Starts for Roots515\_100:

(Start: 86 @51997 has 180 MA's), (188, 52342), (207, 52420), (223, 52528), (232, 52630),

Gene: Roscoe\_48 Start: 40517, Stop: 39957, Start Num: 87

Candidate Starts for Roscoe\_48:

(Start: 51 @40601 has 62 MA's), (Start: 53 @40595 has 3 MA's), (Start: 54 @40592 has 1 MA's), (Start: 87 @40517 has 221 MA's), (Start: 113 @40448 has 1 MA's), (115, 40445), (117, 40442), (138, 40388), (195, 40175), (228, 39968),

Gene: Rosebush\_45 Start: 40816, Stop: 40052, Start Num: 22

Candidate Starts for Rosebush\_45:

(Start: 22 @40816 has 46 MA's), (48, 40729), (78, 40672), (79, 40663), (80, 40660), (84, 40651), (108, 40564), (Start: 113 @40549 has 1 MA's), (145, 40465), (177, 40372), (186, 40321), (195, 40270), (208, 40231),

Gene: Roy17\_47 Start: 40055, Stop: 39417, Start Num: 51

Candidate Starts for Roy17\_47:

(Start: 51 @40055 has 62 MA's), (Start: 53 @40049 has 3 MA's), (Start: 54 @40046 has 1 MA's), (Start: 87 @39971 has 221 MA's), (Start: 113 @39908 has 1 MA's), (115, 39905), (117, 39902), (138, 39848), (195, 39635), (214, 39569), (228, 39428),

Gene: SCentae\_52 Start: 17425, Stop: 18183, Start Num: 42

Candidate Starts for SCentae\_52:

(Start: 42 @17425 has 3 MA's), (112, 17620), (149, 17746), (193, 17926), (205, 17974), (215, 18022),

Gene: SDcharge11\_47 Start: 40299, Stop: 39697, Start Num: 74

Candidate Starts for SDcharge11\_47:

(Start: 74 @40299 has 3 MA's), (Start: 87 @40257 has 221 MA's), (Start: 113 @40188 has 1 MA's), (115, 40185), (117, 40182), (138, 40128), (195, 39915), (228, 39708),

Gene: SVoro\_99 Start: 52175, Stop: 52813, Start Num: 86

Candidate Starts for SVoro\_99:

(Start: 86 @52175 has 180 MA's), (188, 52520), (207, 52598), (223, 52706), (232, 52808),

Gene: Sabella\_45 Start: 40693, Stop: 39929, Start Num: 22

Candidate Starts for Sabella\_45:

(Start: 22 @40693 has 46 MA's), (48, 40606), (78, 40549), (79, 40540), (80, 40537), (84, 40528), (108, 40441), (Start: 113 @40426 has 1 MA's), (145, 40342), (177, 40249), (186, 40198), (195, 40147), (208, 40108),

Gene: Saguaro\_48 Start: 41742, Stop: 41140, Start Num: 82

Candidate Starts for Saguaro\_48:

(59, 41793), (60, 41790), (Start: 82 @41742 has 3 MA's), (97, 41700), (115, 41655), (117, 41652), (120, 41640), (176, 41463), (177, 41460), (190, 41394), (195, 41358), (208, 41319),

Gene: Salacia\_105 Start: 52144, Stop: 52776, Start Num: 86

Candidate Starts for Salacia\_105:

(Start: 86 @52144 has 180 MA's), (188, 52483), (207, 52561), (223, 52669), (232, 52771),

Gene: SallyH\_48 Start: 40425, Stop: 39865, Start Num: 87

Candidate Starts for SallyH\_48:

(Start: 51 @40509 has 62 MA's), (Start: 53 @40503 has 3 MA's), (Start: 54 @40500 has 1 MA's), (Start: 87 @40425 has 221 MA's), (Start: 113 @40356 has 1 MA's), (115, 40353), (117, 40350), (138, 40296), (195, 40083),

Gene: Samaymay\_47 Start: 40271, Stop: 39717, Start Num: 87

Candidate Starts for Samaymay\_47:

(Start: 51 @40355 has 62 MA's), (Start: 53 @40349 has 3 MA's), (Start: 54 @40346 has 1 MA's), (Start: 87 @40271 has 221 MA's), (Start: 113 @40208 has 1 MA's), (115, 40205), (117, 40202), (138, 40148), (195, 39935), (214, 39869), (228, 39728),

Gene: Sapo\_18 Start: 17320, Stop: 16661, Start Num: 71

Candidate Starts for Sapo\_18:

(23, 17491), (32, 17446), (35, 17428), (63, 17338), (Start: 71 @17320 has 1 MA's), (77, 17308), (Start: 86 @17275 has 180 MA's), (146, 17101), (196, 16867), (215, 16798), (217, 16789),

Gene: SassyCat97\_46 Start: 39983, Stop: 39423, Start Num: 87

Candidate Starts for SassyCat97\_46:

(Start: 51 @40067 has 62 MA's), (Start: 53 @40061 has 3 MA's), (Start: 54 @40058 has 1 MA's), (Start: 87 @39983 has 221 MA's), (Start: 113 @39914 has 1 MA's), (115, 39911), (117, 39908), (177, 39743), (195, 39641), (228, 39434),

Gene: Sauce\_102 Start: 51006, Stop: 51638, Start Num: 86

Candidate Starts for Sauce\_102:

(Start: 86 @51006 has 180 MA's), (188, 51345), (207, 51423), (223, 51531), (232, 51633),

Gene: Schadenfreude\_46 Start: 39825, Stop: 39265, Start Num: 87

Candidate Starts for Schadenfreude\_46:

(Start: 51 @39909 has 62 MA's), (Start: 53 @39903 has 3 MA's), (Start: 54 @39900 has 1 MA's), (Start: 87 @39825 has 221 MA's), (Start: 113 @39756 has 1 MA's), (115, 39753), (117, 39750), (177,

39585), (195, 39483), (228, 39276),

Gene: Schueller\_46 Start: 40080, Stop: 39436, Start Num: 51

Candidate Starts for Schueller\_46:

(Start: 51 @40080 has 62 MA's), (Start: 53 @40074 has 3 MA's), (Start: 54 @40071 has 1 MA's),  
(Start: 87 @39996 has 221 MA's), (Start: 113 @39927 has 1 MA's), (115, 39924), (117, 39921), (138,  
39867), (195, 39654), (228, 39447),

Gene: ScoobyDoobyDoo\_226 Start: 130612, Stop: 131253, Start Num: 86

Candidate Starts for ScoobyDoobyDoo\_226:

(Start: 86 @130612 has 180 MA's), (120, 130723), (149, 130816), (169, 130882), (175, 130903), (182,  
130942), (188, 130960), (189, 130966), (207, 131038), (223, 131146), (225, 131164),

Gene: Scoot17C\_48 Start: 40414, Stop: 39854, Start Num: 87

Candidate Starts for Scoot17C\_48:

(Start: 51 @40498 has 62 MA's), (Start: 53 @40492 has 3 MA's), (Start: 54 @40489 has 1 MA's),  
(Start: 87 @40414 has 221 MA's), (Start: 113 @40345 has 1 MA's), (115, 40342), (117, 40339), (138,  
40285), (195, 40072),

Gene: ScottMcG\_98 Start: 50768, Stop: 51400, Start Num: 86

Candidate Starts for ScottMcG\_98:

(Start: 86 @50768 has 180 MA's), (188, 51107), (207, 51185), (223, 51293), (232, 51395),

Gene: Scrick\_47 Start: 40007, Stop: 39447, Start Num: 87

Candidate Starts for Scrick\_47:

(Start: 51 @40091 has 62 MA's), (Start: 53 @40085 has 3 MA's), (Start: 54 @40082 has 1 MA's),  
(Start: 87 @40007 has 221 MA's), (Start: 113 @39938 has 1 MA's), (115, 39935), (117, 39932), (138,  
39878), (177, 39767), (195, 39665), (228, 39458),

Gene: Sebata\_103 Start: 52475, Stop: 53107, Start Num: 86

Candidate Starts for Sebata\_103:

(Start: 86 @52475 has 180 MA's), (188, 52814), (207, 52892), (223, 53000), (232, 53102),

Gene: Selr12\_47 Start: 40094, Stop: 39450, Start Num: 51

Candidate Starts for Selr12\_47:

(Start: 51 @40094 has 62 MA's), (Start: 53 @40088 has 3 MA's), (Start: 54 @40085 has 1 MA's),  
(Start: 87 @40010 has 221 MA's), (Start: 113 @39941 has 1 MA's), (115, 39938), (117, 39935), (177,  
39770), (195, 39668), (228, 39461),

Gene: Serendipitous\_45 Start: 40717, Stop: 39950, Start Num: 26

Candidate Starts for Serendipitous\_45:

(5, 40885), (6, 40879), (8, 40834), (10, 40828), (Start: 26 @40717 has 8 MA's), (79, 40555), (Start: 88  
@40528 has 2 MA's), (119, 40429), (145, 40354), (159, 40315), (195, 40168), (196, 40162), (199,  
40153), (213, 40105),

Gene: Serendipity\_47 Start: 40295, Stop: 39741, Start Num: 87

Candidate Starts for Serendipity\_47:

(Start: 51 @40379 has 62 MA's), (Start: 53 @40373 has 3 MA's), (Start: 54 @40370 has 1 MA's),  
(Start: 87 @40295 has 221 MA's), (Start: 113 @40232 has 1 MA's), (115, 40229), (117, 40226), (138,  
40172), (195, 39959), (214, 39893), (228, 39752),

Gene: Serpentine\_0047 Start: 40366, Stop: 39722, Start Num: 51

Candidate Starts for Serpentine\_0047:

(Start: 51 @40366 has 62 MA's), (Start: 53 @40360 has 3 MA's), (Start: 54 @40357 has 1 MA's),  
(Start: 87 @40282 has 221 MA's), (Start: 113 @40213 has 1 MA's), (115, 40210), (117, 40207), (138,  
40153), (177, 40042), (195, 39940), (228, 39733),

Gene: ShadowBud\_47 Start: 40305, Stop: 39745, Start Num: 87

Candidate Starts for ShadowBud\_47:

(Start: 51 @40389 has 62 MA's), (Start: 53 @40383 has 3 MA's), (Start: 54 @40380 has 1 MA's),  
(Start: 87 @40305 has 221 MA's), (Start: 113 @40236 has 1 MA's), (115, 40233), (117, 40230), (138,  
40176), (177, 40065), (195, 39963), (228, 39756),

Gene: Shaqnato\_94 Start: 49881, Stop: 50513, Start Num: 86

Candidate Starts for Shaqnato\_94:

(Start: 86 @49881 has 180 MA's), (188, 50220), (207, 50298), (223, 50406), (232, 50508),

Gene: Shatter\_40 Start: 34038, Stop: 33349, Start Num: 44

Candidate Starts for Shatter\_40:

(28, 34119), (39, 34071), (Start: 44 @34038 has 11 MA's), (99, 33888), (103, 33876), (105, 33867),  
(180, 33642), (195, 33561), (199, 33546), (213, 33498),

Gene: Sheila\_47 Start: 40319, Stop: 39759, Start Num: 87

Candidate Starts for Sheila\_47:

(Start: 74 @40361 has 3 MA's), (Start: 87 @40319 has 221 MA's), (Start: 113 @40250 has 1 MA's),  
(115, 40247), (117, 40244), (138, 40190), (195, 39977), (228, 39770),

Gene: Shelob\_103 Start: 52591, Stop: 53223, Start Num: 86

Candidate Starts for Shelob\_103:

(Start: 86 @52591 has 180 MA's), (188, 52930), (207, 53008), (223, 53116), (232, 53218),

Gene: Shenyu\_45 Start: 40967, Stop: 40182, Start Num: 26

Candidate Starts for Shenyu\_45:

(4, 41147), (5, 41135), (6, 41129), (10, 41078), (Start: 26 @40967 has 8 MA's), (79, 40805), (Start: 88  
@40778 has 2 MA's), (119, 40679), (145, 40604), (177, 40502), (195, 40400), (196, 40394), (199,  
40385), (213, 40337),

Gene: ShiVal\_47 Start: 40281, Stop: 39721, Start Num: 87

Candidate Starts for ShiVal\_47:

(Start: 51 @40365 has 62 MA's), (Start: 53 @40359 has 3 MA's), (Start: 54 @40356 has 1 MA's),  
(Start: 87 @40281 has 221 MA's), (Start: 113 @40212 has 1 MA's), (115, 40209), (117, 40206), (138,  
40152), (195, 39939), (228, 39732),

Gene: ShiaLabeouf\_100 Start: 51130, Stop: 51762, Start Num: 86

Candidate Starts for ShiaLabeouf\_100:

(Start: 45 @51043 has 5 MA's), (Start: 86 @51130 has 180 MA's), (188, 51469), (207, 51547), (223,  
51655), (232, 51757),

Gene: Shifa\_90 Start: 49856, Stop: 50488, Start Num: 86

Candidate Starts for Shifa\_90:

(Start: 86 @49856 has 180 MA's), (188, 50195), (207, 50273), (223, 50381), (232, 50483),

Gene: Shnickers\_101 Start: 51094, Stop: 51726, Start Num: 86

Candidate Starts for Shnickers\_101:

(Start: 45 @51007 has 5 MA's), (Start: 86 @51094 has 180 MA's), (188, 51433), (207, 51511), (223,  
51619), (232, 51721),

Gene: Shrimp\_101 Start: 51808, Stop: 52446, Start Num: 86

Candidate Starts for Shrimp\_101:

(Start: 86 @51808 has 180 MA's), (188, 52153), (207, 52231), (223, 52339), (232, 52441),

Gene: Sigman\_48 Start: 40489, Stop: 39845, Start Num: 51

Candidate Starts for Sigman\_48:

(Start: 51 @40489 has 62 MA's), (Start: 53 @40483 has 3 MA's), (Start: 54 @40480 has 1 MA's),  
(Start: 87 @40405 has 221 MA's), (Start: 113 @40336 has 1 MA's), (115, 40333), (117, 40330), (138,  
40276), (195, 40063),

Gene: SilverBell\_47 Start: 40384, Stop: 39740, Start Num: 51

Candidate Starts for SilverBell\_47:

(Start: 51 @40384 has 62 MA's), (Start: 53 @40378 has 3 MA's), (Start: 54 @40375 has 1 MA's),  
(Start: 87 @40300 has 221 MA's), (Start: 113 @40231 has 1 MA's), (115, 40228), (117, 40225), (138,  
40171), (177, 40060), (195, 39958), (228, 39751),

Gene: SilverDipper\_102 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for SilverDipper\_102:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223,  
50863), (232, 50965),

Gene: Simielle\_46 Start: 39964, Stop: 39410, Start Num: 87

Candidate Starts for Simielle\_46:

(Start: 51 @40048 has 62 MA's), (Start: 53 @40042 has 3 MA's), (Start: 54 @40039 has 1 MA's),  
(Start: 87 @39964 has 221 MA's), (Start: 113 @39901 has 1 MA's), (115, 39898), (117, 39895), (138,  
39841), (195, 39628), (214, 39562), (228, 39421),

Gene: SirBeauregard\_47 Start: 39977, Stop: 39417, Start Num: 87

Candidate Starts for SirBeauregard\_47:

(Start: 51 @40061 has 62 MA's), (Start: 53 @40055 has 3 MA's), (Start: 54 @40052 has 1 MA's),  
(Start: 87 @39977 has 221 MA's), (Start: 113 @39908 has 1 MA's), (115, 39905), (117, 39902), (138,  
39848), (195, 39635), (228, 39428),

Gene: SirJeffery\_46 Start: 40904, Stop: 40119, Start Num: 26

Candidate Starts for SirJeffery\_46:

(Start: 26 @40904 has 8 MA's), (48, 40817), (79, 40742), (Start: 88 @40715 has 2 MA's), (119, 40616),  
(195, 40337), (199, 40322),

Gene: Sisko\_40 Start: 34816, Stop: 34106, Start Num: 44

Candidate Starts for Sisko\_40:

(Start: 44 @34816 has 11 MA's), (114, 34618), (145, 34525), (177, 34420), (195, 34318), (199, 34303),  
(213, 34255),

Gene: Skippy\_47 Start: 40265, Stop: 39705, Start Num: 87

Candidate Starts for Skippy\_47:

(Start: 51 @40349 has 62 MA's), (Start: 53 @40343 has 3 MA's), (Start: 54 @40340 has 1 MA's),  
(Start: 87 @40265 has 221 MA's), (Start: 113 @40196 has 1 MA's), (115, 40193), (117, 40190), (138,  
40136), (195, 39923), (228, 39716),

Gene: Slatt\_47 Start: 40291, Stop: 39731, Start Num: 87

Candidate Starts for Slatt\_47:

(Start: 51 @40375 has 62 MA's), (Start: 53 @40369 has 3 MA's), (Start: 54 @40366 has 1 MA's),  
(Start: 87 @40291 has 221 MA's), (Start: 113 @40222 has 1 MA's), (115, 40219), (117, 40216), (138,  
40162), (177, 40051), (195, 39949), (228, 39742),

Gene: SmallFry\_101 Start: 50319, Stop: 50951, Start Num: 86

Candidate Starts for SmallFry\_101:

(Start: 45 @50232 has 5 MA's), (Start: 86 @50319 has 180 MA's), (188, 50658), (207, 50736), (223,  
50844), (232, 50946),

Gene: SoilZilla\_97 Start: 51093, Stop: 51725, Start Num: 86

Candidate Starts for SoilZilla\_97:

(Start: 86 @51093 has 180 MA's), (188, 51432), (207, 51510), (223, 51618), (232, 51720),

Gene: Soile\_47 Start: 39994, Stop: 39434, Start Num: 87

Candidate Starts for Soile\_47:

(Start: 51 @40078 has 62 MA's), (Start: 53 @40072 has 3 MA's), (Start: 54 @40069 has 1 MA's),  
(Start: 87 @39994 has 221 MA's), (Start: 113 @39925 has 1 MA's), (115, 39922), (117, 39919), (138,  
39865), (195, 39652), (228, 39445),

Gene: Solosis\_46 Start: 39992, Stop: 39432, Start Num: 87

Candidate Starts for Solosis\_46:

(Start: 51 @40076 has 62 MA's), (Start: 53 @40070 has 3 MA's), (Start: 54 @40067 has 1 MA's),  
(Start: 87 @39992 has 221 MA's), (Start: 113 @39923 has 1 MA's), (115, 39920), (117, 39917), (138,  
39863), (195, 39650), (228, 39443),

Gene: Sophia\_46 Start: 39986, Stop: 39432, Start Num: 87

Candidate Starts for Sophia\_46:

(Start: 51 @40070 has 62 MA's), (Start: 53 @40064 has 3 MA's), (Start: 54 @40061 has 1 MA's),  
(Start: 87 @39986 has 221 MA's), (Start: 113 @39923 has 1 MA's), (115, 39920), (117, 39917), (138,  
39863), (195, 39650), (214, 39584), (228, 39443),

Gene: Soto\_47 Start: 40291, Stop: 39731, Start Num: 87

Candidate Starts for Soto\_47:

(Start: 74 @40333 has 3 MA's), (Start: 87 @40291 has 221 MA's), (Start: 113 @40222 has 1 MA's),  
(115, 40219), (117, 40216), (138, 40162), (195, 39949), (228, 39742),

Gene: Sour\_45 Start: 38694, Stop: 38008, Start Num: 44

Candidate Starts for Sour\_45:

(38, 38730), (Start: 44 @38694 has 11 MA's), (114, 38487), (145, 38394), (177, 38322), (199, 38205),  
(226, 38043),

Gene: SparkleGoddess\_256 Start: 123985, Stop: 124458, Start Num: 124

Candidate Starts for SparkleGoddess\_256:

(118, 123967), (Start: 124 @123985 has 6 MA's), (170, 124111), (172, 124114), (179, 124147), (194,  
124222), (201, 124258), (215, 124315), (218, 124333), (227, 124438),

Gene: Spartan300\_47 Start: 40277, Stop: 39717, Start Num: 87

Candidate Starts for Spartan300\_47:

(Start: 51 @40361 has 62 MA's), (Start: 53 @40355 has 3 MA's), (Start: 54 @40352 has 1 MA's),  
(Start: 87 @40277 has 221 MA's), (Start: 113 @40208 has 1 MA's), (115, 40205), (117, 40202), (138,  
40148), (195, 39935), (228, 39728),

Gene: Spec\_97 Start: 50859, Stop: 51491, Start Num: 86

Candidate Starts for Spec\_97:

(Start: 45 @50772 has 5 MA's), (Start: 86 @50859 has 180 MA's), (188, 51198), (207, 51276), (223, 51384), (232, 51486),

Gene: Specks\_106 Start: 52993, Stop: 53625, Start Num: 86

Candidate Starts for Specks\_106:

(Start: 45 @52906 has 5 MA's), (Start: 86 @52993 has 180 MA's), (188, 53332), (207, 53410), (223, 53518), (232, 53620),

Gene: Sprinklers\_97 Start: 50378, Stop: 51010, Start Num: 86

Candidate Starts for Sprinklers\_97:

(Start: 86 @50378 has 180 MA's), (188, 50717), (207, 50795), (223, 50903), (232, 51005),

Gene: Spud\_101 Start: 51893, Stop: 52525, Start Num: 86

Candidate Starts for Spud\_101:

(Start: 86 @51893 has 180 MA's), (188, 52232), (207, 52310), (223, 52418), (232, 52520),

Gene: Squid\_47 Start: 40067, Stop: 39423, Start Num: 51

Candidate Starts for Squid\_47:

(Start: 51 @40067 has 62 MA's), (Start: 53 @40061 has 3 MA's), (Start: 54 @40058 has 1 MA's), (Start: 87 @39983 has 221 MA's), (Start: 113 @39914 has 1 MA's), (115, 39911), (117, 39908), (177, 39743), (195, 39641), (228, 39434),

Gene: Squiggle\_47 Start: 40001, Stop: 39441, Start Num: 87

Candidate Starts for Squiggle\_47:

(Start: 51 @40085 has 62 MA's), (Start: 53 @40079 has 3 MA's), (Start: 54 @40076 has 1 MA's), (Start: 87 @40001 has 221 MA's), (Start: 113 @39932 has 1 MA's), (115, 39929), (117, 39926), (138, 39872), (195, 39659), (228, 39452),

Gene: SrishMeg2525\_100 Start: 51912, Stop: 52544, Start Num: 86

Candidate Starts for SrishMeg2525\_100:

(Start: 86 @51912 has 180 MA's), (188, 52251), (207, 52329), (223, 52437), (232, 52539),

Gene: StephanieG\_100 Start: 52717, Stop: 53355, Start Num: 86

Candidate Starts for StephanieG\_100:

(Start: 86 @52717 has 180 MA's), (188, 53062), (207, 53140), (223, 53248), (232, 53350),

Gene: Stigma\_254 Start: 123698, Stop: 124171, Start Num: 124

Candidate Starts for Stigma\_254:

(118, 123680), (Start: 124 @123698 has 6 MA's), (170, 123824), (172, 123827), (179, 123860), (194, 123935), (201, 123971), (215, 124028), (218, 124046), (227, 124151),

Gene: Stinger\_41 Start: 39003, Stop: 38269, Start Num: 29

Candidate Starts for Stinger\_41:

(Start: 29 @39003 has 26 MA's), (62, 38883), (78, 38856), (84, 38835), (Start: 88 @38820 has 2 MA's), (97, 38799), (98, 38796), (175, 38595), (177, 38589), (195, 38487), (210, 38442),

Gene: StinkyVeggy\_47 Start: 41044, Stop: 40259, Start Num: 26

Candidate Starts for StinkyVeggy\_47:

(7, 41194), (9, 41158), (13, 41128), (18, 41089), (Start: 26 @41044 has 8 MA's), (79, 40882), (Start: 88 @40855 has 2 MA's), (119, 40756), (145, 40681), (177, 40579), (195, 40477), (196, 40471), (199, 40462), (213, 40414),

Gene: Stormageddon\_179 Start: 113484, Stop: 114164, Start Num: 50

Candidate Starts for Stormageddon\_179:

(Start: 50 @113484 has 2 MA's), (95, 113607), (127, 113712), (153, 113784), (189, 113910), (213, 114012),

Gene: Struggle\_46 Start: 39833, Stop: 39273, Start Num: 87

Candidate Starts for Struggle\_46:

(Start: 51 @39917 has 62 MA's), (Start: 53 @39911 has 3 MA's), (Start: 54 @39908 has 1 MA's), (Start: 87 @39833 has 221 MA's), (Start: 113 @39764 has 1 MA's), (115, 39761), (117, 39758), (138, 39704), (195, 39491), (228, 39284),

Gene: Stubby\_94 Start: 50013, Stop: 50645, Start Num: 86

Candidate Starts for Stubby\_94:

(Start: 86 @50013 has 180 MA's), (188, 50352), (207, 50430), (223, 50538), (232, 50640),

Gene: StubbySaigey\_104 Start: 50510, Stop: 51142, Start Num: 86

Candidate Starts for StubbySaigey\_104:

(Start: 86 @50510 has 180 MA's), (188, 50849), (207, 50927), (223, 51035), (232, 51137),

Gene: Substance289\_99 Start: 50612, Stop: 51244, Start Num: 86

Candidate Starts for Substance289\_99:

(Start: 45 @50525 has 5 MA's), (Start: 86 @50612 has 180 MA's), (188, 50951), (207, 51029), (223, 51137), (232, 51239),

Gene: Suffolk\_47 Start: 40282, Stop: 39722, Start Num: 87

Candidate Starts for Suffolk\_47:

(Start: 51 @40366 has 62 MA's), (Start: 53 @40360 has 3 MA's), (Start: 54 @40357 has 1 MA's), (Start: 87 @40282 has 221 MA's), (Start: 113 @40213 has 1 MA's), (115, 40210), (117, 40207), (138, 40153), (195, 39940), (228, 39733),

Gene: Suigeneris\_46 Start: 40907, Stop: 40122, Start Num: 26

Candidate Starts for Suigeneris\_46:

(Start: 26 @40907 has 8 MA's), (48, 40820), (79, 40745), (Start: 88 @40718 has 2 MA's), (119, 40619), (195, 40340), (199, 40325),

Gene: Sunny\_ Start: 11517, Stop: 12002, Start Num: 116

Candidate Starts for Sunny\_:

(Start: 116 @11517 has 2 MA's), (165, 11652), (175, 11685), (184, 11730), (194, 11772), (202, 11811), (214, 11850), (220, 11907), (223, 11925), (227, 11982),

Gene: Surely\_47 Start: 40288, Stop: 39728, Start Num: 87

Candidate Starts for Surely\_47:

(Start: 51 @40372 has 62 MA's), (Start: 53 @40366 has 3 MA's), (Start: 54 @40363 has 1 MA's), (Start: 87 @40288 has 221 MA's), (Start: 113 @40219 has 1 MA's), (115, 40216), (117, 40213), (177, 40048), (195, 39946), (228, 39739),

Gene: Swiphy\_47 Start: 40283, Stop: 39723, Start Num: 87

Candidate Starts for Swiphy\_47:

(Start: 51 @40367 has 62 MA's), (Start: 53 @40361 has 3 MA's), (Start: 54 @40358 has 1 MA's), (Start: 87 @40283 has 221 MA's), (Start: 113 @40214 has 1 MA's), (115, 40211), (117, 40208), (177, 40043), (195, 39941), (228, 39734),

Gene: Swish\_48 Start: 40406, Stop: 39846, Start Num: 87

Candidate Starts for Swish\_48:

(Start: 51 @40490 has 62 MA's), (Start: 53 @40484 has 3 MA's), (Start: 54 @40481 has 1 MA's),  
(Start: 87 @40406 has 221 MA's), (Start: 113 @40337 has 1 MA's), (115, 40334), (117, 40331), (138,  
40277), (195, 40064),

Gene: TA17A\_47 Start: 40683, Stop: 39919, Start Num: 22

Candidate Starts for TA17A\_47:

(Start: 22 @40683 has 46 MA's), (37, 40641), (48, 40596), (78, 40539), (79, 40530), (80, 40527), (84,  
40518), (108, 40431), (Start: 113 @40416 has 1 MA's), (145, 40332), (177, 40239), (186, 40188), (195,  
40137), (208, 40098),

Gene: Tainan\_105 Start: 52316, Stop: 52948, Start Num: 86

Candidate Starts for Tainan\_105:

(Start: 45 @52229 has 5 MA's), (Start: 86 @52316 has 180 MA's), (188, 52655), (207, 52733), (223,  
52841), (232, 52943),

Gene: TallGrassMM\_47 Start: 39985, Stop: 39347, Start Num: 51

Candidate Starts for TallGrassMM\_47:

(Start: 51 @39985 has 62 MA's), (Start: 53 @39979 has 3 MA's), (Start: 54 @39976 has 1 MA's),  
(Start: 87 @39901 has 221 MA's), (Start: 113 @39838 has 1 MA's), (115, 39835), (117, 39832), (138,  
39778), (195, 39565), (214, 39499), (228, 39358),

Gene: Taraxa\_47 Start: 39486, Stop: 38926, Start Num: 87

Candidate Starts for Taraxa\_47:

(Start: 51 @39570 has 62 MA's), (Start: 53 @39564 has 3 MA's), (Start: 54 @39561 has 1 MA's),  
(Start: 87 @39486 has 221 MA's), (115, 39414), (117, 39411), (138, 39357), (195, 39144), (228,  
38937),

Gene: Teardrop\_100 Start: 50317, Stop: 50949, Start Num: 86

Candidate Starts for Teardrop\_100:

(Start: 45 @50230 has 5 MA's), (Start: 86 @50317 has 180 MA's), (188, 50656), (207, 50734), (223,  
50842), (232, 50944),

Gene: Telesworld\_46 Start: 39980, Stop: 39420, Start Num: 87

Candidate Starts for Telesworld\_46:

(Start: 51 @40064 has 62 MA's), (Start: 53 @40058 has 3 MA's), (Start: 54 @40055 has 1 MA's),  
(Start: 87 @39980 has 221 MA's), (Start: 113 @39911 has 1 MA's), (115, 39908), (117, 39905), (138,  
39851), (177, 39740), (195, 39638), (228, 39431),

Gene: Thales\_63 Start: 57547, Stop: 58155, Start Num: 89

Candidate Starts for Thales\_63:

(72, 57490), (Start: 89 @57547 has 1 MA's), (147, 57727), (156, 57754), (160, 57772), (170, 57808),  
(174, 57820), (177, 57829), (191, 57907), (223, 58075),

Gene: Thonko\_45 Start: 38227, Stop: 37415, Start Num: 27

Candidate Starts for Thonko\_45:

(Start: 24 @38251 has 1 MA's), (Start: 27 @38227 has 1 MA's), (30, 38212), (Start: 44 @38143 has 11  
MA's), (48, 38137), (Start: 87 @38041 has 221 MA's), (91, 38023), (115, 37951), (135, 37897), (177,  
37735), (225, 37480),

Gene: Thora\_47 Start: 40287, Stop: 39727, Start Num: 87

Candidate Starts for Thora\_47:

(Start: 51 @40371 has 62 MA's), (Start: 53 @40365 has 3 MA's), (Start: 54 @40362 has 1 MA's),  
(Start: 87 @40287 has 221 MA's), (Start: 113 @40218 has 1 MA's), (115, 40215), (117, 40212), (177,  
40047), (195, 39945), (228, 39738),

Gene: ThreeOh3D2\_48 Start: 40504, Stop: 39860, Start Num: 51

Candidate Starts for ThreeOh3D2\_48:

(Start: 51 @40504 has 62 MA's), (Start: 53 @40498 has 3 MA's), (Start: 54 @40495 has 1 MA's),  
(Start: 87 @40420 has 221 MA's), (Start: 113 @40351 has 1 MA's), (115, 40348), (117, 40345), (138,  
40291), (195, 40078),

Gene: Thunderbird\_46 Start: 40072, Stop: 39428, Start Num: 51

Candidate Starts for Thunderbird\_46:

(Start: 51 @40072 has 62 MA's), (Start: 53 @40066 has 3 MA's), (Start: 54 @40063 has 1 MA's),  
(Start: 87 @39988 has 221 MA's), (Start: 113 @39919 has 1 MA's), (115, 39916), (117, 39913), (138,  
39859), (195, 39646), (228, 39439),

Gene: Timmi\_46 Start: 39987, Stop: 39433, Start Num: 87

Candidate Starts for Timmi\_46:

(Start: 51 @40071 has 62 MA's), (Start: 53 @40065 has 3 MA's), (Start: 54 @40062 has 1 MA's),  
(Start: 87 @39987 has 221 MA's), (Start: 113 @39924 has 1 MA's), (115, 39921), (117, 39918), (138,  
39864), (195, 39651), (214, 39585), (228, 39444),

Gene: Tinciduntolum\_47 Start: 40827, Stop: 40057, Start Num: 22

Candidate Starts for Tinciduntolum\_47:

(Start: 22 @40827 has 46 MA's), (48, 40734), (78, 40677), (79, 40668), (80, 40665), (84, 40656), (108,  
40569), (Start: 113 @40554 has 1 MA's), (145, 40470), (177, 40377), (186, 40326), (195, 40275), (208,  
40236),

Gene: TinyTim\_101 Start: 51570, Stop: 52202, Start Num: 86

Candidate Starts for TinyTim\_101:

(Start: 86 @51570 has 180 MA's), (188, 51909), (207, 51987), (223, 52095), (232, 52197),

Gene: TomBombadil\_47 Start: 40272, Stop: 39718, Start Num: 87

Candidate Starts for TomBombadil\_47:

(Start: 51 @40356 has 62 MA's), (Start: 53 @40350 has 3 MA's), (Start: 54 @40347 has 1 MA's),  
(Start: 87 @40272 has 221 MA's), (Start: 113 @40209 has 1 MA's), (115, 40206), (117, 40203), (138,  
40149), (195, 39936), (214, 39870), (228, 39729),

Gene: Tomlarah\_47 Start: 40275, Stop: 39715, Start Num: 87

Candidate Starts for Tomlarah\_47:

(Start: 51 @40359 has 62 MA's), (Start: 53 @40353 has 3 MA's), (Start: 54 @40350 has 1 MA's),  
(Start: 87 @40275 has 221 MA's), (Start: 113 @40206 has 1 MA's), (115, 40203), (117, 40200), (138,  
40146), (195, 39933), (228, 39726),

Gene: Tonenili\_116 Start: 55317, Stop: 55949, Start Num: 86

Candidate Starts for Tonenili\_116:

(43, 55221), (Start: 86 @55317 has 180 MA's), (188, 55656), (198, 55713), (207, 55734), (223, 55842),  
(232, 55944),

Gene: Toni\_46 Start: 39979, Stop: 39425, Start Num: 87

Candidate Starts for Toni\_46:

(Start: 51 @40063 has 62 MA's), (Start: 53 @40057 has 3 MA's), (Start: 54 @40054 has 1 MA's),  
(Start: 87 @39979 has 221 MA's), (Start: 113 @39916 has 1 MA's), (115, 39913), (117, 39910), (138,

39856), (195, 39643), (214, 39577), (228, 39436),

Gene: TooFast2Furius\_48 Start: 40601, Stop: 39957, Start Num: 51

Candidate Starts for TooFast2Furius\_48:

(Start: 51 @40601 has 62 MA's), (Start: 53 @40595 has 3 MA's), (Start: 54 @40592 has 1 MA's),  
(Start: 87 @40517 has 221 MA's), (Start: 113 @40448 has 1 MA's), (115, 40445), (117, 40442), (138,  
40388), (195, 40175), (228, 39968),

Gene: Tooj\_47 Start: 40342, Stop: 39782, Start Num: 87

Candidate Starts for Tooj\_47:

(Start: 51 @40426 has 62 MA's), (Start: 53 @40420 has 3 MA's), (Start: 54 @40417 has 1 MA's),  
(Start: 87 @40342 has 221 MA's), (Start: 113 @40273 has 1 MA's), (115, 40270), (117, 40267), (138,  
40213), (177, 40102), (195, 40000), (228, 39793),

Gene: Tortoise16\_98 Start: 50918, Stop: 51550, Start Num: 86

Candidate Starts for Tortoise16\_98:

(Start: 45 @50831 has 5 MA's), (Start: 86 @50918 has 180 MA's), (188, 51257), (207, 51335), (223,  
51443), (232, 51545),

Gene: TraderJ\_42 Start: 35883, Stop: 35308, Start Num: 83

Candidate Starts for TraderJ\_42:

(Start: 83 @35883 has 11 MA's), (99, 35844), (140, 35733), (155, 35694), (184, 35571), (188, 35559),  
(190, 35550), (197, 35508), (199, 35505), (200, 35502), (203, 35493),

Gene: Tres\_46 Start: 40696, Stop: 39932, Start Num: 22

Candidate Starts for Tres\_46:

(Start: 22 @40696 has 46 MA's), (48, 40609), (78, 40552), (79, 40543), (80, 40540), (84, 40531), (108,  
40444), (Start: 113 @40429 has 1 MA's), (145, 40345), (177, 40252), (186, 40201), (195, 40150), (208,  
40111),

Gene: Triad\_47 Start: 39230, Stop: 38586, Start Num: 51

Candidate Starts for Triad\_47:

(Start: 51 @39230 has 62 MA's), (Start: 53 @39224 has 3 MA's), (Start: 54 @39221 has 1 MA's),  
(Start: 87 @39146 has 221 MA's), (Start: 113 @39077 has 1 MA's), (115, 39074), (117, 39071), (138,  
39017), (177, 38906), (195, 38804), (228, 38597),

Gene: Trine\_54 Start: 39655, Stop: 38969, Start Num: 74

Candidate Starts for Trine\_54:

(20, 39847), (Start: 29 @39799 has 26 MA's), (66, 39667), (Start: 74 @39655 has 3 MA's), (76, 39652),  
(93, 39583), (115, 39514), (137, 39448), (142, 39433), (152, 39394), (155, 39391), (171, 39310), (186,  
39235), (190, 39220), (228, 38980),

Gene: Trinitium\_98 Start: 50276, Stop: 50908, Start Num: 86

Candidate Starts for Trinitium\_98:

(Start: 86 @50276 has 180 MA's), (188, 50615), (207, 50693), (223, 50801), (232, 50903),

Gene: True\_46 Start: 39985, Stop: 39425, Start Num: 87

Candidate Starts for True\_46:

(Start: 51 @40069 has 62 MA's), (Start: 53 @40063 has 3 MA's), (Start: 54 @40060 has 1 MA's),  
(Start: 87 @39985 has 221 MA's), (Start: 113 @39916 has 1 MA's), (115, 39913), (117, 39910), (177,  
39745), (195, 39643), (228, 39436),

Gene: Trypo\_48 Start: 40500, Stop: 39856, Start Num: 51

Candidate Starts for Trypo\_48:

(Start: 51 @40500 has 62 MA's), (Start: 53 @40494 has 3 MA's), (Start: 54 @40491 has 1 MA's),  
(Start: 87 @40416 has 221 MA's), (Start: 113 @40347 has 1 MA's), (115, 40344), (117, 40341), (138,  
40287), (195, 40074),

Gene: Turret\_96 Start: 49715, Stop: 50353, Start Num: 86

Candidate Starts for Turret\_96:

(Start: 86 @49715 has 180 MA's), (188, 50060), (207, 50138), (223, 50246), (232, 50348),

Gene: Tyke\_102 Start: 52459, Stop: 53091, Start Num: 86

Candidate Starts for Tyke\_102:

(Start: 45 @52372 has 5 MA's), (Start: 86 @52459 has 180 MA's), (188, 52798), (207, 52876), (223,  
52984), (232, 53086),

Gene: TyrionL\_46 Start: 39841, Stop: 39281, Start Num: 87

Candidate Starts for TyrionL\_46:

(Start: 51 @39925 has 62 MA's), (Start: 53 @39919 has 3 MA's), (Start: 54 @39916 has 1 MA's),  
(Start: 87 @39841 has 221 MA's), (Start: 113 @39772 has 1 MA's), (115, 39769), (117, 39766), (177,  
39601), (195, 39499), (228, 39292),

Gene: UAch1\_47 Start: 40294, Stop: 39734, Start Num: 87

Candidate Starts for UAch1\_47:

(Start: 51 @40378 has 62 MA's), (Start: 53 @40372 has 3 MA's), (Start: 54 @40369 has 1 MA's),  
(Start: 87 @40294 has 221 MA's), (Start: 113 @40225 has 1 MA's), (115, 40222), (117, 40219), (177,  
40054), (195, 39952), (228, 39745),

Gene: UncleHowie\_47 Start: 40068, Stop: 39424, Start Num: 51

Candidate Starts for UncleHowie\_47:

(Start: 51 @40068 has 62 MA's), (Start: 53 @40062 has 3 MA's), (Start: 54 @40059 has 1 MA's),  
(Start: 87 @39984 has 221 MA's), (Start: 113 @39915 has 1 MA's), (115, 39912), (117, 39909), (177,  
39744), (195, 39642), (228, 39435),

Gene: Usavi\_47 Start: 40282, Stop: 39722, Start Num: 87

Candidate Starts for Usavi\_47:

(Start: 87 @40282 has 221 MA's), (Start: 113 @40213 has 1 MA's), (115, 40210), (117, 40207), (138,  
40153), (195, 39940), (228, 39733),

Gene: Vaishali24\_46 Start: 40027, Stop: 39383, Start Num: 51

Candidate Starts for Vaishali24\_46:

(Start: 51 @40027 has 62 MA's), (Start: 53 @40021 has 3 MA's), (Start: 54 @40018 has 1 MA's),  
(Start: 87 @39943 has 221 MA's), (Start: 113 @39874 has 1 MA's), (115, 39871), (117, 39868), (138,  
39814), (177, 39703), (195, 39601), (228, 39394),

Gene: Valjean\_47 Start: 40280, Stop: 39720, Start Num: 87

Candidate Starts for Valjean\_47:

(Start: 51 @40364 has 62 MA's), (Start: 53 @40358 has 3 MA's), (Start: 54 @40355 has 1 MA's),  
(Start: 87 @40280 has 221 MA's), (Start: 113 @40211 has 1 MA's), (115, 40208), (117, 40205), (138,  
40151), (195, 39938), (228, 39731),

Gene: ValleyTerrace\_101 Start: 50338, Stop: 50970, Start Num: 86

Candidate Starts for ValleyTerrace\_101:

(Start: 45 @50251 has 5 MA's), (Start: 86 @50338 has 180 MA's), (188, 50677), (207, 50755), (223,  
50863), (232, 50965),

Gene: Vaticameos\_43 Start: 38050, Stop: 37412, Start Num: 51

Candidate Starts for Vaticameos\_43:

(Start: 51 @38050 has 62 MA's), (Start: 53 @38044 has 3 MA's), (Start: 54 @38041 has 1 MA's), (Start: 87 @37966 has 221 MA's), (Start: 113 @37903 has 1 MA's), (115, 37900), (117, 37897), (138, 37843), (195, 37630), (214, 37564), (228, 37423),

Gene: Veritas\_46 Start: 39847, Stop: 39287, Start Num: 87

Candidate Starts for Veritas\_46:

(Start: 51 @39931 has 62 MA's), (Start: 53 @39925 has 3 MA's), (Start: 54 @39922 has 1 MA's), (Start: 87 @39847 has 221 MA's), (115, 39775), (117, 39772), (138, 39718), (177, 39607), (195, 39505), (228, 39298),

Gene: Vic9\_00045 Start: 41205, Stop: 40438, Start Num: 22

Candidate Starts for Vic9\_00045:

(Start: 22 @41205 has 46 MA's), (48, 41115), (78, 41058), (79, 41049), (80, 41046), (84, 41037), (108, 40950), (Start: 113 @40935 has 1 MA's), (145, 40851), (186, 40707), (195, 40656), (208, 40617),

Gene: Vincenzo\_43 Start: 41068, Stop: 40448, Start Num: 61

Candidate Starts for Vincenzo\_43:

(Start: 61 @41068 has 2 MA's), (111, 40942), (123, 40909), (135, 40882), (146, 40849), (175, 40774), (177, 40768), (190, 40702), (210, 40621), (224, 40528), (228, 40459),

Gene: VioletZ\_44 Start: 40524, Stop: 39766, Start Num: 29

Candidate Starts for VioletZ\_44:

(Start: 29 @40524 has 26 MA's), (41, 40455), (Start: 86 @40347 has 180 MA's), (97, 40317), (115, 40269), (120, 40257), (139, 40212), (173, 40101), (177, 40086), (195, 39984), (210, 39939), (214, 39918), (217, 39900), (227, 39792),

Gene: Virapocalypse\_47 Start: 40275, Stop: 39715, Start Num: 87

Candidate Starts for Virapocalypse\_47:

(Start: 51 @40359 has 62 MA's), (Start: 53 @40353 has 3 MA's), (Start: 54 @40350 has 1 MA's), (Start: 87 @40275 has 221 MA's), (Start: 113 @40206 has 1 MA's), (115, 40203), (117, 40200), (177, 40035), (195, 39933), (228, 39726),

Gene: Virgeve\_46 Start: 40052, Stop: 39492, Start Num: 87

Candidate Starts for Virgeve\_46:

(Start: 51 @40136 has 62 MA's), (Start: 53 @40130 has 3 MA's), (Start: 54 @40127 has 1 MA's), (Start: 87 @40052 has 221 MA's), (Start: 113 @39983 has 1 MA's), (115, 39980), (117, 39977), (138, 39923), (195, 39710), (228, 39503),

Gene: Vista\_47 Start: 40363, Stop: 39725, Start Num: 53

Candidate Starts for Vista\_47:

(Start: 51 @40369 has 62 MA's), (Start: 53 @40363 has 3 MA's), (Start: 54 @40360 has 1 MA's), (Start: 87 @40285 has 221 MA's), (Start: 113 @40216 has 1 MA's), (115, 40213), (117, 40210), (177, 40045), (195, 39943), (228, 39736),

Gene: Vivaldi\_47 Start: 40389, Stop: 39751, Start Num: 53

Candidate Starts for Vivaldi\_47:

(25, 40509), (47, 40404), (Start: 53 @40389 has 3 MA's), (Start: 54 @40386 has 1 MA's), (Start: 87 @40311 has 221 MA's), (Start: 113 @40242 has 1 MA's), (115, 40239), (117, 40236), (177, 40071), (195, 39969), (228, 39762),

Gene: Vortex\_47 Start: 40066, Stop: 39428, Start Num: 51

Candidate Starts for Vortex\_47:

(Start: 51 @40066 has 62 MA's), (Start: 53 @40060 has 3 MA's), (Start: 54 @40057 has 1 MA's),  
(Start: 87 @39982 has 221 MA's), (Start: 113 @39919 has 1 MA's), (115, 39916), (117, 39913), (138,  
39859), (195, 39646), (214, 39580), (228, 39439),

Gene: Vortrix\_115 Start: 54635, Stop: 55267, Start Num: 86

Candidate Starts for Vortrix\_115:

(43, 54539), (Start: 86 @54635 has 180 MA's), (188, 54974), (207, 55052), (223, 55160), (232, 55262),

Gene: Waleliano\_42 Start: 40448, Stop: 39693, Start Num: 29

Candidate Starts for Waleliano\_42:

(Start: 29 @40448 has 26 MA's), (41, 40382), (Start: 86 @40274 has 180 MA's), (97, 40244), (115,  
40196), (120, 40184), (173, 40028), (177, 40013), (182, 39980), (195, 39911), (210, 39866), (217,  
39827), (227, 39719),

Gene: Wallhey\_46 Start: 39845, Stop: 39285, Start Num: 87

Candidate Starts for Wallhey\_46:

(Start: 51 @39929 has 62 MA's), (Start: 53 @39923 has 3 MA's), (Start: 54 @39920 has 1 MA's),  
(Start: 87 @39845 has 221 MA's), (Start: 113 @39776 has 1 MA's), (115, 39773), (117, 39770), (177,  
39605), (195, 39503), (228, 39296),

Gene: Wally\_100 Start: 50348, Stop: 50980, Start Num: 86

Candidate Starts for Wally\_100:

(Start: 86 @50348 has 180 MA's), (188, 50687), (207, 50765), (223, 50873), (232, 50975),

Gene: Waterdiva\_47 Start: 40361, Stop: 39717, Start Num: 51

Candidate Starts for Waterdiva\_47:

(Start: 51 @40361 has 62 MA's), (Start: 53 @40355 has 3 MA's), (Start: 54 @40352 has 1 MA's),  
(Start: 87 @40277 has 221 MA's), (Start: 113 @40208 has 1 MA's), (115, 40205), (117, 40202), (138,  
40148), (195, 39935), (228, 39728),

Gene: Weher20\_47 Start: 40276, Stop: 39716, Start Num: 87

Candidate Starts for Weher20\_47:

(Start: 51 @40360 has 62 MA's), (Start: 53 @40354 has 3 MA's), (Start: 54 @40351 has 1 MA's),  
(Start: 87 @40276 has 221 MA's), (Start: 113 @40207 has 1 MA's), (115, 40204), (117, 40201), (138,  
40147), (177, 40036), (195, 39934), (228, 39727),

Gene: West99\_46 Start: 40816, Stop: 40052, Start Num: 22

Candidate Starts for West99\_46:

(Start: 22 @40816 has 46 MA's), (48, 40729), (78, 40672), (79, 40663), (80, 40660), (84, 40651), (108,  
40564), (Start: 113 @40549 has 1 MA's), (145, 40465), (177, 40372), (186, 40321), (195, 40270), (208,  
40231),

Gene: Westy\_258 Start: 124515, Stop: 124988, Start Num: 124

Candidate Starts for Westy\_258:

(118, 124497), (Start: 124 @124515 has 6 MA's), (170, 124641), (172, 124644), (179, 124677), (194,  
124752), (201, 124788), (202, 124791), (215, 124845), (218, 124863), (225, 124929), (227, 124968),

Gene: Widow\_49 Start: 37464, Stop: 36880, Start Num: 86

Candidate Starts for Widow\_49:

(43, 37569), (57, 37536), (81, 37476), (Start: 86 @37464 has 180 MA's), (Start: 88 @37455 has 2  
MA's), (Start: 121 @37359 has 1 MA's), (158, 37254), (170, 37203), (219, 36993), (227, 36900),

Gene: Willis\_102 Start: 51699, Stop: 52337, Start Num: 86  
Candidate Starts for Willis\_102:  
(Start: 86 @51699 has 180 MA's), (188, 52044), (223, 52230), (232, 52332),

Gene: Windsor\_46 Start: 39981, Stop: 39421, Start Num: 87  
Candidate Starts for Windsor\_46:  
(Start: 51 @40065 has 62 MA's), (Start: 53 @40059 has 3 MA's), (Start: 54 @40056 has 1 MA's),  
(Start: 87 @39981 has 221 MA's), (Start: 113 @39912 has 1 MA's), (115, 39909), (117, 39906), (138,  
39852), (195, 39639), (228, 39432),

Gene: Wooper\_42 Start: 35889, Stop: 35314, Start Num: 83  
Candidate Starts for Wooper\_42:  
(Start: 83 @35889 has 11 MA's), (99, 35850), (140, 35739), (155, 35700), (184, 35577), (188, 35565),  
(190, 35556), (197, 35514), (199, 35511), (200, 35508), (203, 35499),

Gene: Xavier\_46 Start: 40073, Stop: 39435, Start Num: 51  
Candidate Starts for Xavier\_46:  
(Start: 51 @40073 has 62 MA's), (Start: 53 @40067 has 3 MA's), (Start: 54 @40064 has 1 MA's),  
(Start: 87 @39989 has 221 MA's), (Start: 113 @39926 has 1 MA's), (115, 39923), (117, 39920), (138,  
39866), (195, 39653), (214, 39587), (228, 39446),

Gene: Xincheng\_41 Start: 39884, Stop: 39150, Start Num: 29  
Candidate Starts for Xincheng\_41:  
(Start: 29 @39884 has 26 MA's), (Start: 86 @39710 has 180 MA's), (97, 39680), (115, 39632), (120,  
39620), (154, 39530), (175, 39476), (177, 39470), (195, 39368), (210, 39323), (217, 39284),

Gene: Yago84\_40 Start: 34890, Stop: 34180, Start Num: 44  
Candidate Starts for Yago84\_40:  
(Start: 44 @34890 has 11 MA's), (114, 34692), (145, 34599), (177, 34494), (195, 34392), (199, 34377),  
(213, 34329),

Gene: Yassified\_98 Start: 50425, Stop: 51057, Start Num: 86  
Candidate Starts for Yassified\_98:  
(Start: 86 @50425 has 180 MA's), (188, 50764), (207, 50842), (223, 50950), (232, 51052),

Gene: YemiJoy2021\_102 Start: 51801, Stop: 52439, Start Num: 86  
Candidate Starts for YemiJoy2021\_102:  
(Start: 86 @51801 has 180 MA's), (188, 52146), (207, 52224), (223, 52332), (232, 52434),

Gene: Yeshua\_42 Start: 35866, Stop: 35291, Start Num: 83  
Candidate Starts for Yeshua\_42:  
(Start: 83 @35866 has 11 MA's), (99, 35827), (140, 35716), (155, 35677), (184, 35554), (188, 35542),  
(190, 35533), (197, 35491), (199, 35488), (200, 35485), (203, 35476),

Gene: Yoshand\_48 Start: 40419, Stop: 39859, Start Num: 87  
Candidate Starts for Yoshand\_48:  
(Start: 51 @40503 has 62 MA's), (Start: 53 @40497 has 3 MA's), (Start: 54 @40494 has 1 MA's),  
(Start: 87 @40419 has 221 MA's), (Start: 113 @40350 has 1 MA's), (115, 40347), (117, 40344), (138,  
40290), (195, 40077),

Gene: YouGoGlencoco\_47 Start: 40279, Stop: 39719, Start Num: 87  
Candidate Starts for YouGoGlencoco\_47:

(Start: 51 @40363 has 62 MA's), (Start: 53 @40357 has 3 MA's), (Start: 54 @40354 has 1 MA's),  
(Start: 87 @40279 has 221 MA's), (Start: 113 @40210 has 1 MA's), (115, 40207), (117, 40204), (177,  
40039), (195, 39937), (228, 39730),

Gene: YoungMoneyMata\_102 Start: 50971, Stop: 51603, Start Num: 86

Candidate Starts for YoungMoneyMata\_102:

(Start: 86 @50971 has 180 MA's), (188, 51310), (207, 51388), (223, 51496), (232, 51598),

Gene: Yucca\_101 Start: 51489, Stop: 52121, Start Num: 86

Candidate Starts for Yucca\_101:

(Start: 86 @51489 has 180 MA's), (188, 51828), (207, 51906), (223, 52014), (232, 52116),

Gene: Zaider\_48 Start: 40509, Stop: 39949, Start Num: 87

Candidate Starts for Zaider\_48:

(Start: 51 @40593 has 62 MA's), (Start: 53 @40587 has 3 MA's), (Start: 54 @40584 has 1 MA's),  
(Start: 87 @40509 has 221 MA's), (Start: 113 @40440 has 1 MA's), (115, 40437), (117, 40434), (177,  
40269), (195, 40167), (228, 39960),

Gene: Zalkecks\_102 Start: 51490, Stop: 52122, Start Num: 86

Candidate Starts for Zalkecks\_102:

(Start: 86 @51490 has 180 MA's), (188, 51829), (207, 51907), (223, 52015), (232, 52117),

Gene: Zeenon\_103 Start: 51575, Stop: 52207, Start Num: 86

Candidate Starts for Zeenon\_103:

(Start: 86 @51575 has 180 MA's), (188, 51914), (207, 51992), (223, 52100), (232, 52202),

Gene: Zelda\_47 Start: 40326, Stop: 39766, Start Num: 87

Candidate Starts for Zelda\_47:

(Start: 51 @40410 has 62 MA's), (Start: 53 @40404 has 3 MA's), (Start: 54 @40401 has 1 MA's),  
(Start: 87 @40326 has 221 MA's), (Start: 113 @40257 has 1 MA's), (115, 40254), (117, 40251), (177,  
40086), (195, 39984), (228, 39777),

Gene: Zemanar\_43 Start: 40424, Stop: 39696, Start Num: 29

Candidate Starts for Zemanar\_43:

(Start: 29 @40424 has 26 MA's), (Start: 86 @40256 has 180 MA's), (97, 40226), (98, 40223), (115,  
40178), (120, 40166), (175, 40022), (177, 40016), (195, 39914), (210, 39869), (217, 39830), (227,  
39722),

Gene: Zenteno07\_50 Start: 39868, Stop: 39071, Start Num: 22

Candidate Starts for Zenteno07\_50:

(Start: 17 @39898 has 1 MA's), (Start: 22 @39868 has 46 MA's), (46, 39763), (49, 39757), (78, 39694),  
(Start: 87 @39661 has 221 MA's), (Start: 88 @39658 has 2 MA's), (94, 39634), (153, 39448), (177,  
39391), (195, 39286), (208, 39247),

Gene: Zonia\_47 Start: 40296, Stop: 39736, Start Num: 87

Candidate Starts for Zonia\_47:

(Start: 51 @40380 has 62 MA's), (Start: 53 @40374 has 3 MA's), (Start: 54 @40371 has 1 MA's),  
(Start: 87 @40296 has 221 MA's), (Start: 113 @40227 has 1 MA's), (115, 40224), (117, 40221), (177,  
40056), (195, 39954), (228, 39747),

Gene: ZygoTaiga\_100 Start: 52729, Stop: 53367, Start Num: 86

Candidate Starts for ZygoTaiga\_100:

(Start: 86 @52729 has 180 MA's), (188, 53074), (207, 53152), (223, 53260), (232, 53362),

