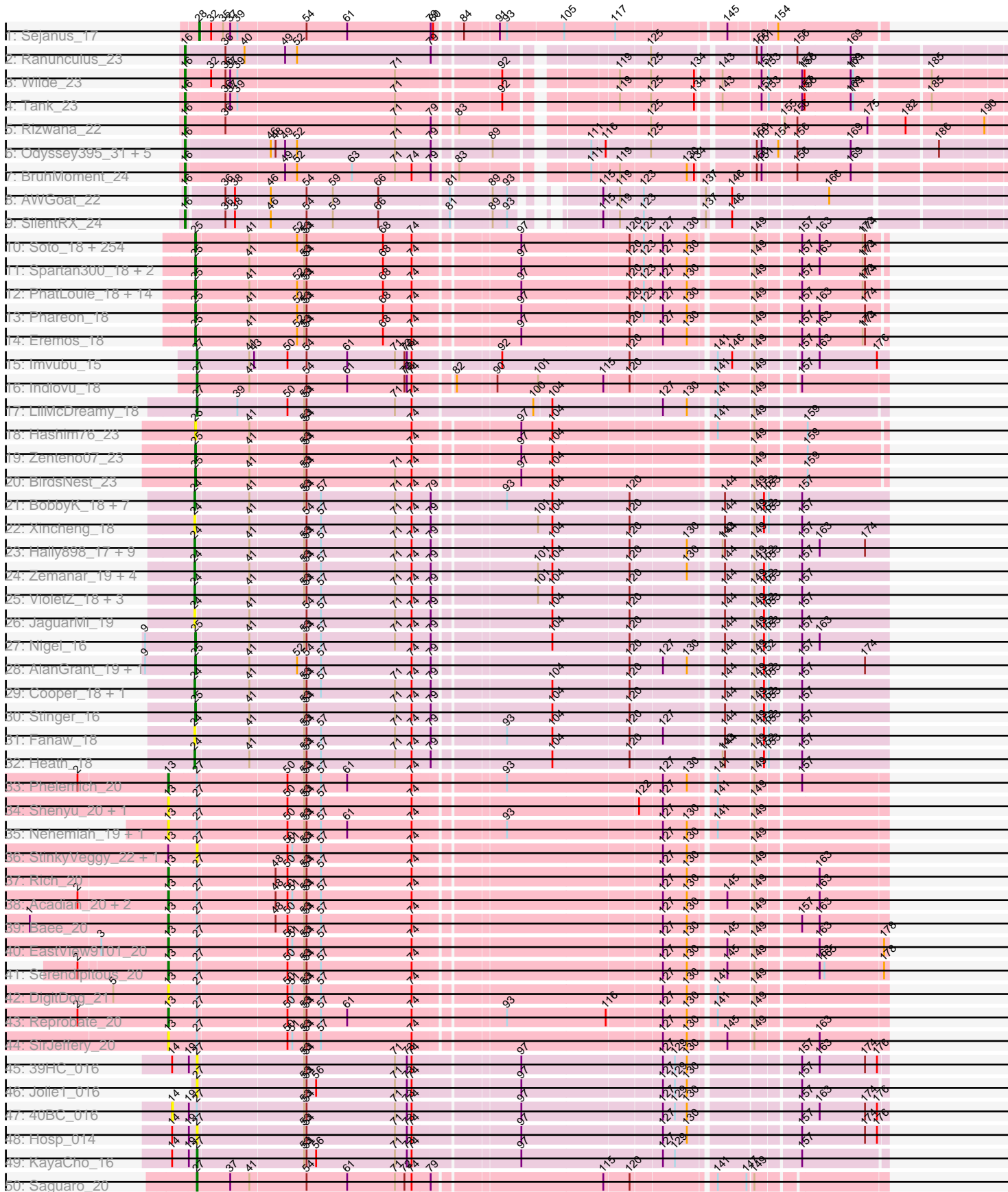
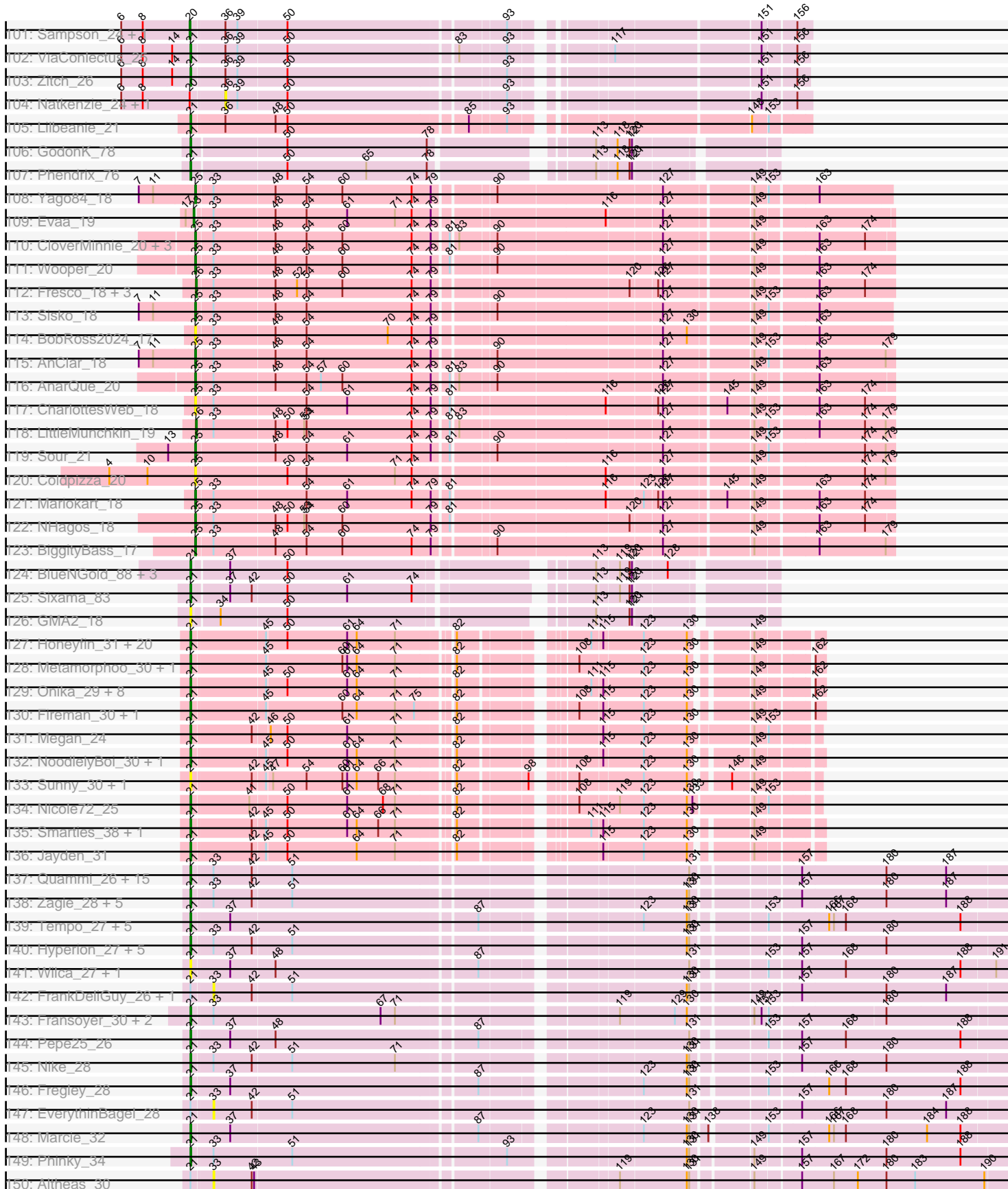


Pham 193623

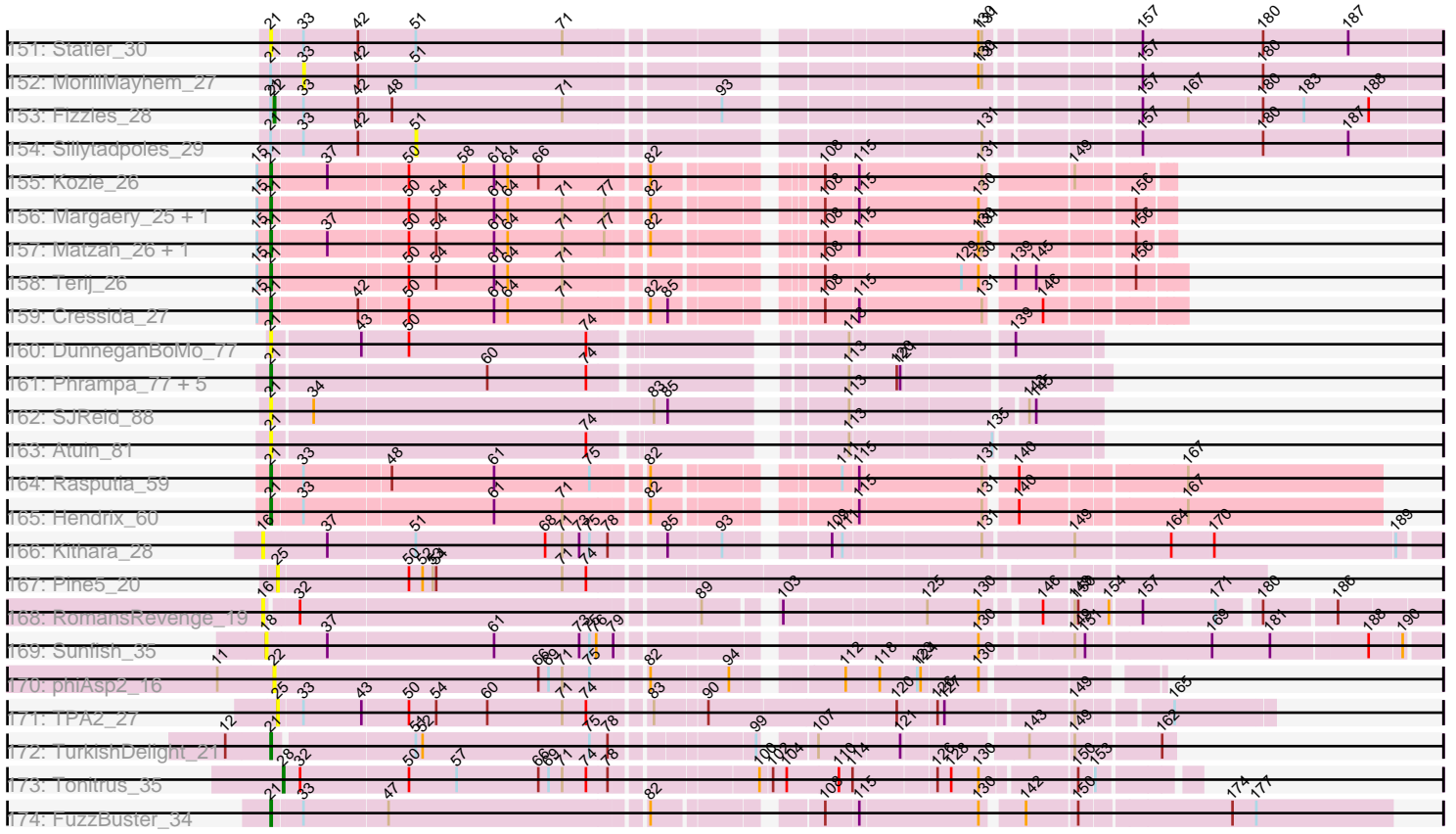




Pham 193623



Pham 193623



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 193623 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193623 has 646 members, 93 are drafts.

Phages represented in each track:

- Track 1 : Sejanus\_17
- Track 2 : Ranunculus\_23
- Track 3 : Wilde\_23
- Track 4 : Tank\_23
- Track 5 : Rizwana\_22
- Track 6 : Odyssey395\_31, Beagle\_30, NyleyClemson\_25, MellowYellow\_26, Pointis\_29, Pureglobe5\_31
- Track 7 : BruhMoment\_24
- Track 8 : AWGoat\_22
- Track 9 : SilentRX\_24
- Track 10 : Soto\_18, Phergie\_17, TallGrassMM\_18, Simielle\_17, Zaider\_19, HenryJackson\_17, BlackStallion\_18, Gyarad\_0018, Puhltonio\_18, Cornobble\_17, Fringe\_18, FugateOSU\_17, Numberten\_18, JacAttac\_18, Lulumae\_17, Phamished\_18, Carthage\_17, Doddsville\_18, OliverWalter\_18, Andre\_18, HSavage\_18, Gwilliam\_18, Dione\_17, Bishoperium\_17, FluffyNinja\_18, Mikota\_18, Yoshand\_18, Virgeve\_17, Etaye\_18, Toni\_17, Plmatters\_18, Mcshane\_17, Melc17\_18, AltPhacts\_18, Hocus\_17, CheetO\_18, Hartsy\_18, Nacho\_0018, Vista\_18, JakeO\_17, Piglet\_0017, AbsoluteMadLad\_17, CamL\_18, Morty\_18, Daffy\_18, Squid\_18, Antonia\_17, Weher20\_18, DelRivs\_17, ABU\_18, Mosaic\_17, KlimbOn\_18, BlueHusk\_18, Hamish\_18, Suffolk\_18, Rimu\_17, PhenghisKhan\_17, ThreeOh3D2\_18, Grand2040\_17, ImtiyazSitla\_17, Charles1\_18, Solosis\_17, Mutante\_17, Sophia\_17, Crownjwl\_18, Kikipoo\_18, PhrankReynolds\_17, Vaishali24\_17, Maru\_17, Serendipity\_18, Roy17\_18, Maskar\_17, Placalicious\_17, Olive\_18, Swish\_18, Haimas\_18, DirtJuice\_18, Oline\_17, Jiraiya\_18, Pherdinand\_18, DuchessDung\_17, Chorkpop\_18, Hetaeria\_18, Surely\_18, Phleuron\_17, Slatt\_18, Derpp\_17, Orfeu\_17, Giraffe\_18, Phipps\_18, KLucky39\_18, Burr\_17, Selr12\_18, MrPhizzler\_17, DaddyDaniels\_18, UncleHowie\_18, Virapocalypse\_18, Pipsqueak\_18, Childish\_17, IsaacEli\_18, MiniBoss\_18, Ricotta\_17, Apizium\_17, Mulan\_17, LuckyMarjie\_17, Duggie\_17, Prickles\_18, MichaelPhcott\_17, Gophee\_18, Schueller\_17, Horchata\_18, Kailash\_18, OSmaximus\_18, Morgushi\_18, Mana\_17, Katniss\_18, Magic8\_18, True\_17, Boehler\_18, MitKao\_18, Olak\_17, Thunderbird\_17, DoesntMatter\_18, JangoPhett\_18, Aelin\_17, Riggan\_18, SDcharge11\_18, Durga\_18, Sigman\_18, Soile\_18, Mecca\_17, UAch1\_18, Mesh1\_18, Fang\_18, Labeouficaum\_17, TomBombadil\_18, Quisquillae\_18, Craff\_18, Waterdiva\_18, Kwadwo\_17, Pacifista\_17, Manad\_17, PhrodoBaggins\_17, Gareth\_17, Chute\_17, JDog\_17, Beaglebox\_17, Mag7\_17, Robyn\_17, Cannibal\_18, FriarPreacher\_18, Bluephacebaby\_17, Podrick\_18, Lasso\_18, Altwerkus\_17, Scoot17C\_18, Emiris\_18,

Ashraf\_17, LostAndPhound\_17, Lopsy\_17, Samaymay\_18, Schadenfreude\_17, Dati\_18, Tooj\_18, Haleema\_17, RedMaple\_17, Newman\_18, Dingo\_18, ProfessorX\_18, Chaelin\_17, Orion\_18, Xavier\_17, Lulwa\_18, SassyCat97\_17, Megatron\_18, Cobra\_18, PG1\_18, Vortex\_18, QueenBeane\_18, Telesworld\_17, Omniscient\_18, Vivaldi\_18, LeeLot\_18, Murdoc\_18, Coletti\_17, Iridoclysis\_18, Vaticameos\_18, KingTut\_17, Inchworm\_18, PinheadLarry\_18, Potter\_17, Pops\_18, Longacauda\_17, Held\_18, Lego3393\_18, CampRoach\_18, Kimbrough\_18, Lumine\_17, Scrick\_17, Oosterbaan\_18, Anderson\_18, Roliet\_18, Harvey\_18, Legolas\_17, Matalotodo\_18, Nyala\_17, Tomlarah\_18, LemonSlice\_18, Timmi\_17, TyrionL\_17, Hertubise\_18, Windsor\_17, Inverness\_18, Fozzie\_17, Chunky\_18, Zelda\_18, Jillium\_17, DonSanchon\_17, Badfish\_18, MRabcd\_17, Thora\_18, Orwigg\_18, Adriana\_18, HighStump\_17, LasagnaCat\_18, Frankicide\_18, Basato\_19, Dice\_17, Daka\_18, Freya\_17, Roscoe\_19, Cher\_17, Buckeye\_18, Serpentine\_0018, Colbert\_18, Megamind20\_18, Banjo\_17, Brilliant\_18, Veritas\_17, Skippy\_18, LeiMonet\_18, Kahve\_17, Usavi\_18, YouGoGlencoco\_18, Squiggle\_18, Phunky\_18, SilverBell\_18, ShiVal\_18, Cosmolli16\_17, Eugenia\_18, Kloppinator\_18, Chah\_18, KingVeVeVe\_18, Nicole21\_18, PhatCats2014\_18

- Track 11 : Spartan300\_18, Valjean\_18, EmpTee\_18
- Track 12 : PhatLouie\_18, Keitherie\_18, CharlieGBrown\_17, BatteryCK\_17, Zonia\_18, MelsMeow\_17, Wallhey\_17, Kwksand96\_17, Struggle\_17, Sheila\_18, Pinkman\_17, GeneCoco\_18, Jiminy\_17, Trypo\_18, Swiphy\_18
- Track 13 : Phareon\_18
- Track 14 : Eremos\_18
- Track 15 : Imvubu\_15
- Track 16 : Indlovu\_18
- Track 17 : LilMcDreamy\_18
- Track 18 : Hashim76\_23
- Track 19 : Zenteno07\_23
- Track 20 : BirdsNest\_23
- Track 21 : BobbyK\_18, Fortunato\_18, Frederick\_18, Mudslide\_18, RawrgerThat\_18, Austelle\_19, Prince\_18, Apex\_18
- Track 22 : Xincheng\_18
- Track 23 : Hally898\_17, Nanao\_17, Lambano\_17, ChrisnMich\_17, Epah\_17, Poster\_17, Antihero\_17, GinPorsche\_17, Ahwei\_17, JAMaL\_18
- Track 24 : Zemanar\_19, Mithril\_18, Hangman\_18, Waleliano\_18, BrownCNA\_19
- Track 25 : VioletZ\_18, Lolalove\_18, Magpie\_18, Hydro\_18
- Track 26 : JaguarMi\_19
- Track 27 : Nigel\_16
- Track 28 : AlanGrant\_19, Vincenzo\_19
- Track 29 : Cooper\_18, QueenPie\_18
- Track 30 : Stinger\_16
- Track 31 : Fanaw\_18
- Track 32 : Heath\_18
- Track 33 : Phelemich\_20
- Track 34 : Shenyu\_20, Nangang\_20
- Track 35 : Nehemiah\_19, Mysterious\_21
- Track 36 : StinkyVeggy\_22, KarasumaRum\_22
- Track 37 : Rich\_20
- Track 38 : Acadian\_20, Donny\_20, Suigeneris\_20
- Track 39 : Bae\_20
- Track 40 : EastView9101\_20
- Track 41 : Serendipitous\_20
- Track 42 : DigitDog\_21

- Track 43 : Reprobate\_20
- Track 44 : SirJeffery\_20
- Track 45 : 39HC\_016
- Track 46 : Jolie1\_016
- Track 47 : 40BC\_016
- Track 48 : Hosp\_014
- Track 49 : KayaCho\_16
- Track 50 : Saguaro\_20
- Track 51 : Thonko\_19
- Track 52 : Rinkes\_22
- Track 53 : PenguinLover67\_21
- Track 54 : Funsized\_22
- Track 55 : Knocker\_22
- Track 56 : CRB2\_22
- Track 57 : Quesadilla\_21
- Track 58 : TP1604\_16, Salete\_16, Asis\_16, BayC\_16, BabyGotBac\_16, Maih\_16
- Track 59 : Mischief19\_24
- Track 60 : Abt2graduatex2\_17
- Track 61 : Xkcd426\_22
- Track 62 : YDN12\_17
- Track 63 : RainyPolka\_17
- Track 64 : KingstonB\_50, Sting\_48, DonTron\_49, Soos\_45
- Track 65 : ColdSoup\_50, Jollymon\_50
- Track 66 : Clawz\_49
- Track 67 : Mutzi\_24
- Track 68 : TillyBobJoe\_22, Gezellig\_23, Valary\_25, Portcullis\_22, Phlop\_22, Wizard\_22, PullumCavea\_22, Shinji\_22, Fireball\_23
- Track 69 : ClamChowder\_24, KimmyK\_24, PinkCoffee\_24, Halo3\_23, Salvador\_22, Twister6\_24, VanDeWege\_25, CoveyB\_25, Danyall\_24, Fugax\_24, Jambalaya\_22, Togo\_22, Evamon\_22, Savbucketdawg\_22, Nubi\_22, Barb\_24, SmokingBunny\_22
- Track 70 : Bakery\_23, YungMoney\_24
- Track 71 : Arri\_25, RogerDodger\_25
- Track 72 : Clown\_26
- Track 73 : Belphegor\_21
- Track 74 : Lennon\_25, ChadMasterC\_23, Fitzgerald\_21, Sitar\_25
- Track 75 : Bibwit\_24, Stultus\_23, Sedona\_25
- Track 76 : Tycho\_23, Gaea\_23
- Track 77 : BobBob\_21, Affeca\_23, Shivanishola\_23, Vivi2\_23, Tangent\_21, Angelicage\_23, Charming\_21
- Track 78 : Kewpiedoll\_24, Galadriel\_25, Ailee\_23, MoontowerMania\_22, Fosterous\_21, McKinley\_24, Love\_25, Paries\_24, Geodirt\_22, Nordenberg\_18
- Track 79 : Sanjuju\_21, Barsten\_24, Jabberwocky\_21, Brandonk123\_25
- Track 80 : RiverRaider\_24
- Track 81 : Ashertheman\_24, Baumdotcom\_23, Gustavo\_23, Kwobi\_24, Tangerine\_23, StorminNorm\_23, Saronaya\_23
- Track 82 : JKSyngboy\_22, Bizzy\_24, LilHam\_21, Kroos\_24, Derg\_21, Baddon\_23
- Track 83 : Kamashten\_24, Thing3\_24
- Track 84 : Flatwoods\_24
- Track 85 : Rofo\_23
- Track 86 : Keitabear\_25
- Track 87 : SchottB\_22
- Track 88 : Ribeye\_24
- Track 89 : YorkOnyx\_24

- Track 90 : Leonard\_24, Phinally\_24, Inspectinfecti\_25
- Track 91 : Hans\_26, Phauci\_17
- Track 92 : Ali17\_22
- Track 93 : MelBins\_25
- Track 94 : EMoore\_19
- Track 95 : Tiamoceli\_24, GTE6\_23, Chickadee\_23, EdmundFerry\_22, RoadKill\_21, Twonlo\_21
- Track 96 : Dexeert\_24
- Track 97 : Kwekel\_23
- Track 98 : Zipp\_24, Delrey21\_24, DoctorFroggo\_24, Verity\_24
- Track 99 : Scioto\_24
- Track 100 : APunk\_26
- Track 101 : Sampson\_24, Tardus\_25
- Track 102 : ViaConlectus\_25
- Track 103 : Zitch\_26
- Track 104 : Natkenzie\_24, Abblin\_24
- Track 105 : Lilbeanie\_21
- Track 106 : GodonK\_78
- Track 107 : Phendrix\_76
- Track 108 : Yago84\_18
- Track 109 : Evaa\_19
- Track 110 : CloverMinnie\_20, CaiB\_20, MakoManhole\_20, MossRose\_20
- Track 111 : Wooper\_20
- Track 112 : Fresco\_18, Axumite\_18, Shatter\_18, Ligma\_18
- Track 113 : Sisko\_18
- Track 114 : BobRoss2024\_17
- Track 115 : AnClar\_18
- Track 116 : AnarQue\_20
- Track 117 : CharlottesWeb\_18
- Track 118 : LittleMunchkin\_19
- Track 119 : Sour\_21
- Track 120 : Coldpizza\_20
- Track 121 : Mariokart\_18
- Track 122 : NHagos\_18
- Track 123 : BiggityBass\_17
- Track 124 : BlueNGold\_88, Mareelih\_87, Boopy\_89, Forza\_89
- Track 125 : Sixama\_83
- Track 126 : GMA2\_18
- Track 127 : Honeyfin\_31, Jollipop\_30, Savannah\_29, EarickHC\_30, Jefe\_30, KaiHaiDragon\_30, Kowalski\_29, Pulchra\_31, Paschalis\_29, Ganandorf\_29, PiperSansNom\_30, Selwyn23\_31, Ramiel05\_29, Crisis\_31, PierreOrion\_30, LittleFortune\_31, Yeti\_30, Busephilis\_29, Quhwah\_33, CrazyRich\_29, Piperis\_30
- Track 128 : Metamorphoo\_30, RobsFeet\_31
- Track 129 : Onika\_29, Antares\_30, Scumberland\_31, Phrancesco\_30, Shotgun\_29, Hermeonysus\_29, BrazzalePHS\_29, Cranjjs\_31, Phorgeous\_29
- Track 130 : Fireman\_30, Tyumbra\_28
- Track 131 : Megan\_24
- Track 132 : NoodlelyBoi\_30, ClearAsMud\_32
- Track 133 : Sunny\_30, Merry\_30
- Track 134 : Nicole72\_25
- Track 135 : Smarties\_38, Ariadne\_38
- Track 136 : Jayden\_31



- Track 137 : Quammi\_26, Lonelysoil\_27, Rudy\_26, Jehoshaphat\_30, Wayne3\_29, Phabia\_28, Zhafia\_31, Casend\_29, Viceroy\_27, Llemily\_28, Wheelie\_27, Teehee\_29, DonaldDuck\_28, Squash\_30, StrawberryJamm\_30, SallyK\_29
- Track 138 : Zagie\_28, Tissue\_28, Grassboy\_29, Rowlf\_24, Judebell\_30, Namago\_28
- Track 139 : Tempo\_27, Romm\_29, CandC\_26, Kelcole\_26, OneinaGillian\_27, RobinRose\_29
- Track 140 : Hyperion\_27, Blab\_26, Mashley\_26, AluminumJesus\_26, Gazebo\_27, BabyDotz\_27
- Track 141 : Wilca\_27, BirdInFrench\_27
- Track 142 : FrankDeliGuy\_26, Kyva\_30
- Track 143 : Fransoyer\_30, SadLad\_32, RubyRalph\_30
- Track 144 : Pepe25\_26
- Track 145 : Nike\_28
- Track 146 : Fregley\_28
- Track 147 : EverythinBagel\_28
- Track 148 : Marcie\_32
- Track 149 : Phinky\_34
- Track 150 : Altheas\_30
- Track 151 : Statler\_30
- Track 152 : MorillMayhem\_27
- Track 153 : Fizzles\_28
- Track 154 : Sillytadpoles\_29
- Track 155 : Kozie\_26
- Track 156 : Margaery\_25, MementoMori\_26
- Track 157 : Matzah\_26, Cinna\_25
- Track 158 : Terij\_26
- Track 159 : Cressida\_27
- Track 160 : DunneganBoMo\_77
- Track 161 : Phrampa\_77, Talia1610\_83, Bloom\_87, Patbob\_84, Mimi\_90, Racecar\_84
- Track 162 : SJReid\_88
- Track 163 : Atuin\_81
- Track 164 : Rasputia\_59
- Track 165 : Hendrix\_60
- Track 166 : Kithara\_28
- Track 167 : Pine5\_20
- Track 168 : RomansRevenge\_19
- Track 169 : Sunfish\_35
- Track 170 : phiAsp2\_16
- Track 171 : TPA2\_27
- Track 172 : TurkishDelight\_21
- Track 173 : Tonitrus\_35
- Track 174 : FuzzBuster\_34

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

The start number called the most often in the published annotations is 25, it was called in 282 of the 553 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ABU\_18, AbsoluteMadLad\_17, Adriana\_18, Aelin\_17, AlanGrant\_19, AltPhacts\_18, Altwerkus\_17, AnClar\_18, AnarQue\_20, Anderson\_18, Andre\_18, Antonia\_17, Apizium\_17, Ashraf\_17, Badfish\_18, Banjo\_17, Basato\_19, BatteryCK\_17, Beaglebox\_17, BiggityBass\_17, BirdsNest\_23, Bishoperium\_17, BlackStallion\_18, BlueHusk\_18, Bluephacebaby\_17, BobRoss2024\_17, Boehler\_18, Brilliant\_18, Buckeye\_18, Burr\_17, CaiB\_20, CamL\_18, CampRoach\_18, Cannibal\_18, Carthage\_17, Chaelin\_17, Chah\_18, Charles1\_18, CharlieGBrown\_17, CharlottesWeb\_18, CheetO\_18, Cher\_17, Childish\_17, Chorkpop\_18, Chunky\_18, Chute\_17, CloverMinnie\_20, Cobra\_18, Colbert\_18, Coldpizza\_20, Coletti\_17, Cornobble\_17, Cosmolli16\_17, Craff\_18, Crownjwl\_18, DaddyDaniels\_18, Daffy\_18, Daka\_18, Dati\_18, DelRivs\_17, Derpp\_17, Dice\_17, Dingo\_18, Dione\_17, DirtJuice\_18, Doddsville\_18, DoesntMatter\_18, DonSanchon\_17, DuchessDung\_17, Duggie\_17, Durga\_18, Emiris\_18, EmpTee\_18, Eremos\_18, Etaye\_18, Eugenia\_18, Fang\_18, FluffyNinja\_18, Fozzie\_17, Frankicide\_18, Freya\_17, FriarPreacher\_18, Fringe\_18, FugateOSU\_17, Gareth\_17, GeneCoco\_18, Giraffe\_18, Gophee\_18, Grand2040\_17, Gwilliam\_18, Gyarad\_0018, HSavage\_18, Haimas\_18, Haleema\_17, Hamish\_18, Hartsy\_18, Harvey\_18, Hashim76\_23, Held\_18, HenryJackson\_17, Hertubise\_18, Hetaeria\_18, HighStump\_17, Hocus\_17, Horchata\_18, ImtiyazSitla\_17, Inchworm\_18, Inverness\_18, Iridoclysis\_18, IsaacEli\_18, JDog\_17, JacAttac\_18, JakeO\_17, JangoPhett\_18, Jillium\_17, Jiminy\_17, Jiraiya\_18, KLucky39\_18, Kahve\_17, Kailash\_18, Katniss\_18, Keitherie\_18, Kikipoo\_18, Kimbrough\_18, KingTut\_17, KingVeVeVe\_18, KlimbOn\_18, Kloppinator\_18, Kwadwo\_17, Kwksand96\_17, Labeouficaum\_17, LasagnaCat\_18, Lasso\_18, LeeLot\_18, Lego3393\_18, Legolas\_17, LeiMonet\_18, LemonSlice\_18, Longacauda\_17, Lopsy\_17, LostAndPhound\_17, LuckyMarjie\_17, Lulumae\_17, Lulwa\_18, Lumine\_17, MRabcd\_17, Mag7\_17, Magic8\_18, MakoManhole\_20, Mana\_17, Manad\_17, Mariokart\_18, Maru\_17, Maskar\_17, Matalotodo\_18, Mcshane\_17, Mecca\_17, Megamind20\_18, Megatron\_18, Melc17\_18, MelsMeow\_17, Mesh1\_18, MichaelPhcott\_17, Mikota\_18, MiniBoss\_18, MitKao\_18, Morgushi\_18, Morty\_18, Mosaic\_17, MossRose\_20, MrPhizzler\_17, Mulan\_17, Murdoc\_18, Mutante\_17, NHagos\_18, Nacho\_0018, Newman\_18, Nicole21\_18, Nigel\_16, Numberten\_18, Nyala\_17, OSmaximus\_18, Olak\_17, Oline\_17, Olive\_18, OliverWalter\_18, Omniscient\_18, Oosterbaan\_18, Orfeu\_17, Orion\_18, Orwigg\_18, PG1\_18, Pacifista\_17, Phamished\_18, Phareon\_18, PhatCats2014\_18, PhatLouie\_18, PhenghisKhan\_17, Pherdinand\_18, Phergie\_17, Phipps\_18, Phleuron\_17, PhrankReynolds\_17, PhrodoBaggins\_17, Phunky\_18, Piglet\_0017, Pine5\_20, PinheadLarry\_18, Pinkman\_17, Pipsqueak\_18, Placalicious\_17, Plmatters\_18, Podrick\_18, Pops\_18, Potter\_17, Prickles\_18, ProfessorX\_18, Puhltonio\_18, QueenBeane\_18, Quisquiliae\_18, RedMaple\_17, Ricotta\_17, Riggan\_18, Rimu\_17, Robyn\_17, Roliet\_18, Roscoe\_19, Roy17\_18, SDcharge11\_18, Samaymay\_18, SassyCat97\_17, Schadenfreude\_17, Schueller\_17, Scoot17C\_18, Scrick\_17, Selr12\_18, Serendipity\_18, Serpentine\_0018, Sheila\_18, ShiVal\_18, Sigman\_18, SilverBell\_18, Simielle\_17, Sisko\_18, Skippy\_18, Slatt\_18, Soile\_18, Solosis\_17, Sophia\_17, Soto\_18, Sour\_21, Spartan300\_18, Squid\_18, Squiggle\_18, Stinger\_16, Struggle\_17, Suffolk\_18, Surely\_18, Swiphy\_18, Swish\_18, TPA2\_27, TallGrassMM\_18, Telesworld\_17, Thora\_18, ThreeOh3D2\_18, Thunderbird\_17, Timmi\_17, TomBombadil\_18, Tomlarah\_18, Toni\_17, Tooj\_18, True\_17, Trypo\_18, TyrionL\_17, UAch1\_18, UncleHowie\_18, Usavi\_18, Vaishali24\_17, Valjean\_18, Vaticameos\_18, Veritas\_17, Vincenzo\_19, Virapocalypse\_18, Virgeve\_17, Vista\_18, Vivaldi\_18, Vortex\_18, Wallhey\_17, Waterdiva\_18, Weher20\_18, Windsor\_17, Wooper\_20, Xavier\_17, Yago84\_18, Yoshand\_18, YouGoGlencoco\_18, Zaider\_19, Zelda\_18, Zenteno07\_23, Zonia\_18,

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

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

- 39HC\_016, 40BC\_016, APunk\_26, AWGoat\_22, Abblin\_24, Abt2graduatex2\_17, Acadian\_20, Affeca\_23, Ahwei\_17, Ailee\_23, Ali17\_22, Altheas\_30, AluminumJesus\_26, Angelicage\_23, Antares\_30, Antihero\_17, Apex\_18, Ariadne\_38, Arri\_25, Ashertheman\_24, Asis\_16, Atuin\_81, Austelle\_19, Axumite\_18, BabyDotz\_27, BabyGotBac\_16, Baddon\_23, Bae\_20, Bakery\_23, Barb\_24, Barsten\_24, Baumdotcom\_23, BayC\_16, Beagle\_30, Belphegor\_21, Bibwit\_24, BirdInFrench\_27, Bizzy\_24, Blab\_26, Bloom\_87, BlueNGold\_88, BobBob\_21, BobbyK\_18, Boopy\_89, Brandonk123\_25, BrazzalePHS\_29, BrownCNA\_19, BruhMoment\_24, Busephilis\_29, CRB2\_22, CandC\_26, Casend\_29, ChadMasterC\_23, Charming\_21, Chickadee\_23, ChrisnMich\_17, Cinna\_25, ClamChowder\_24, Clawz\_49, ClearAsMud\_32, Clown\_26, ColdSoup\_50, Cooper\_18, CoveyB\_25, Cranjis\_31, CrazyRich\_29, Cressida\_27, Crisis\_31, Danyall\_24, Delrey21\_24, Derg\_21, Dextert\_24, DigitDog\_21, DoctorFroggo\_24, DonTron\_49, DonaldDuck\_28, Donny\_20, DunneganBoMo\_77, EMOore\_19, EarickHC\_30, EastView9101\_20, EdmundFerry\_22, Epah\_17, Evaa\_19, Evamon\_22, EverythinBagel\_28, Fanaw\_18, Fireball\_23, Fireman\_30, Fitzgerald\_21, Fizzles\_28, Flatwoods\_24, Fortunato\_18, Forza\_89, Fosterous\_21, FrankDeliGuy\_26, Fransoyer\_30, Frederick\_18, Fregley\_28, Fresco\_18, Fugax\_24, Funsized\_22, FuzzBuster\_34, GMA2\_18, GTE6\_23, Gaea\_23, Galadriel\_25, Ganandorf\_29, Gazebo\_27, Geodirt\_22, Gezellig\_23, GinPorsche\_17, GodonK\_78, Grassboy\_29, Gustavo\_23, Hally898\_17, Halo3\_23, Hangman\_18, Hans\_26, Heath\_18, Hendrix\_60, Hermeonysus\_29, Honeyfin\_31, Hosp\_014, Hydro\_18, Hyperion\_27, Imvubu\_15, Indlovu\_18, Inspectinfecti\_25, JAMaL\_18, JKSyngboy\_22, Jabberwocky\_21, JaguarMi\_19, Jambalaya\_22, Jayden\_31, Jefe\_30, Jehoshaphat\_30, Jolie1\_016, Jollipop\_30, Jollymon\_50, Judebell\_30, KaiHaiDragon\_30, Kamashten\_24, KarasumaRum\_22, KayaCho\_16, Keitabear\_25, Kelcole\_26, Kewpiedoll\_24, KimmyK\_24, KingstonB\_50, Kithara\_28, Knocker\_22, Kowalski\_29, Kozi\_26, Kroos\_24, Kwekel\_23, Kwobi\_24, Kyva\_30, Lambano\_17, Lennon\_25, Leonard\_24, Ligma\_18, LilHam\_21, LilMcDreamy\_18, Lilbeanie\_21, LittleFortune\_31, LittleMunchkin\_19, Llemily\_28, Lolalove\_18, Lonelysoil\_27, Love\_25, Magpie\_18, Maih\_16, Marcie\_32, Mareelih\_87, Margaery\_25, Mashley\_26, Matzah\_26, McKinley\_24, Megan\_24, MelBins\_25, MellowYellow\_26, MementoMori\_26, Merry\_30, Metamorphoo\_30, Mimi\_90, Mischief19\_24, Mithril\_18, MoontowerMania\_22, MorillMayhem\_27, Mudslide\_18, Mutzi\_24, Mysterious\_21, Namago\_28, Nanao\_17, Nangang\_20, Natkenzie\_24, Nehemiah\_19, Nicole72\_25, Nike\_28, NoodlelyBoi\_30, Nordenberg\_18, Nubi\_22, NyleyClemson\_25, Odyssey395\_31, OneinaGillian\_27, Onika\_29, Paries\_24, Paschalis\_29, Patbob\_84, PenguinLover67\_21, Pepe25\_26, Phabia\_28, Phauci\_17, Phelemich\_20, Phendrix\_76, Phinally\_24, Phinky\_34, Phlop\_22, Phorgeous\_29, Phrampa\_77, Phrancesco\_30, PierreOrion\_30, PinkCoffee\_24, PiperSansNom\_30, Piperis\_30, Pointis\_29, Portcullis\_22, Poster\_17, Prince\_18, Pulchra\_31, PullumCavea\_22, Pureglobe5\_31, Quammi\_26, QueenPie\_18, Quesadilla\_21, Quhwah\_33, Racecar\_84, RainyPolka\_17, Ramiel05\_29, Ranunculus\_23, Rasputia\_59, RawrgerThat\_18, Reprobate\_20, Ribeye\_24, Rich\_20, Rinkes\_22, RiverRaider\_24, Rizwana\_22, RoadKill\_21, RobinRose\_29, RobsFeet\_31, Rofo\_23, RogerDodger\_25, RomansRevenge\_19, Romm\_29, Rowlf\_24, RubyRalph\_30, Rudy\_26, SJReid\_88, SadLad\_32, Saguaro\_20, Salete\_16, SallyK\_29, Salvador\_22, Sampson\_24, Sanjuju\_21, Saronaya\_23, Savannah\_29, Savbucketdawg\_22,

SchottB\_22, Scioto\_24, Scumberland\_31, Sedona\_25, Sejanus\_17, Selwyn23\_31, Serendipitous\_20, Shatter\_18, Shenyu\_20, Shinji\_22, Shivanishola\_23, Shotgun\_29, SilentRX\_24, Sillytadpoles\_29, SirJeffery\_20, Sitar\_25, Sixama\_83, Smarties\_38, SmokingBunny\_22, Soos\_45, Squash\_30, Statler\_30, Sting\_48, StinkyVeggy\_22, StorminNorm\_23, StrawberryJamm\_30, Stultus\_23, Suigeneris\_20, Sunfish\_35, Sunny\_30, TP1604\_16, Talia1610\_83, Tangent\_21, Tangerine\_23, Tank\_23, Tardus\_25, Teehee\_29, Tempo\_27, Terij\_26, Thing3\_24, Thonko\_19, Tiamoceli\_24, TillyBobJoe\_22, Tissue\_28, Togo\_22, Tonitrus\_35, TurkishDelight\_21, Twister6\_24, Twonlo\_21, Tycho\_23, Tyrumbra\_28, Valary\_25, VanDeWege\_25, Verity\_24, ViaConlectus\_25, Viceroy\_27, VioletZ\_18, Vivi2\_23, Waleliano\_18, Wayne3\_29, Wheelie\_27, Wilca\_27, Wilde\_23, Wizard\_22, Xincheng\_18, Xkcd426\_22, YDN12\_17, Yeti\_30, YorkOnyx\_24, YungMoney\_24, Zagie\_28, Zemanar\_19, Zhafia\_31, Zipp\_24, Zitch\_26, phiAsp2\_16,

### Summary by start number:

#### Start 13:

- Found in 18 of 646 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 9 of 553
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Acadian\_20 (B5), Bae\_20 (B5), DigitDog\_21 (B5), Donny\_20 (B5), EastView9101\_20 (B5), Mysterious\_21 (B5), Nangang\_20 (B5), Nehemiah\_19 (B5), Phelemich\_20 (B5), Reprobate\_20 (B5), Rich\_20 (B5), Serendipitous\_20 (B5), Shenyu\_20 (B5), SirJeffery\_20 (B5), Suigeneris\_20 (B5),

#### Start 14:

- Found in 6 of 646 ( 0.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: 40BC\_016 (B6),

#### Start 16:

- Found in 15 of 646 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 12 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat\_22 (AP4), Beagle\_30 (AP2), BruhMoment\_24 (AP3), Kithara\_28 (singleton), MellowYellow\_26 (AP2), NyleyClemson\_25 (AP2), Odyssey395\_31 (AP2), Pointis\_29 (AP2), Pureglobe5\_31 (AP2), Ranunculus\_23 (AP), Rizwana\_22 (AP1), RomansRevenge\_19 (singleton), SilentRX\_24 (AP4), Tank\_23 (AP1), Wilde\_23 (AP1),

#### Start 18:

- Found in 1 of 646 ( 0.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sunfish\_35 (singleton),

#### Start 20:

- Found in 21 of 646 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 16 of 553
- Called 85.7% of time when present

- Phage (with cluster) where this start called: APunk\_26 (DE4), Chickadee\_23 (DE3), Delrey21\_24 (DE4), Dextert\_24 (DE3), DoctorFroggo\_24 (DE4), EdmundFerry\_22 (DE3), GTE6\_23 (DE3), Gaea\_23 (DE1), Kwekel\_23 (DE3), RoadKill\_21 (DE3), Sampson\_24 (DE4), Tardus\_25 (DE4), Tiamoceli\_24 (DE3), Twonlo\_21 (DE3), Tycho\_23 (DE1), Verity\_24 (DE4), YorkOnyx\_24 (DE1), Zipp\_24 (DE4),

Start 21:

- Found in 216 of 646 ( 33.4% ) of genes in pham
- Manual Annotations of this start: 179 of 553
- Called 96.8% of time when present
- Phage (with cluster) where this start called: Affeca\_23 (DE1), Ailee\_23 (DE1), Ali17\_22 (DE2), AluminumJesus\_26 (EG), Angelicage\_23 (DE1), Antares\_30 (EC), Ariadne\_38 (EC), Arri\_25 (DC1), Ashertheman\_24 (DE1), Atuin\_81 (FC), BabyDotz\_27 (EG), Baddon\_23 (DE1), Bakery\_23 (DC1), Barb\_24 (DC1), Barsten\_24 (DE1), Baumdotcom\_23 (DE1), Belphegor\_21 (DE), Bibwit\_24 (DE1), BirdInFrench\_27 (EG), Bizzy\_24 (DE1), Blab\_26 (EG), Bloom\_87 (FC), BlueNGold\_88 (DS), BobBob\_21 (DE1), Boopy\_89 (DS), Brandonk123\_25 (DE1), BrazzalePHS\_29 (EC), Busephilis\_29 (EC), CandC\_26 (EG), Casend\_29 (EG), ChadMasterC\_23 (DE1), Charming\_21 (DE1), Cinna\_25 (EI), ClamChowder\_24 (DC1), ClearAsMud\_32 (EC), Clown\_26 (DC2), CoveyB\_25 (DC1), Cranjis\_31 (EC), CrazyRich\_29 (EC), Cressida\_27 (EI), Crisis\_31 (EC), Danyall\_24 (DC1), Derg\_21 (DE1), DonaldDuck\_28 (EG), DunneganBoMo\_77 (FC), EMoore\_19 (DE2), EarickHC\_30 (EC), Evamon\_22 (DC1), Fireball\_23 (DC1), Fireman\_30 (EC), Fitzgerald\_21 (DE1), Flatwoods\_24 (DE1), Forza\_89 (DS), Fosterous\_21 (DE1), Fransoyer\_30 (EG), Fregley\_28 (EG), Fugax\_24 (DC1), FuzzBuster\_34 (singleton), GMA2\_18 (DS), Galadriel\_25 (DE1), Ganandorf\_29 (EC), Gazebo\_27 (EG), Geodirt\_22 (DE1), Gezellig\_23 (DC1), GodonK\_78 (DK), Grassboy\_29 (EG), Gustavo\_23 (DE1), Halo3\_23 (DC1), Hans\_26 (DE2), Hendrix\_60 (GC), Hermeonysus\_29 (EC), Honeyfin\_31 (EC), Hyperion\_27 (EG), Inspectinfecti\_25 (DE2), JKSyngboy\_22 (DE1), Jabberwocky\_21 (DE1), Jambalaya\_22 (DC1), Jayden\_31 (EC), Jefe\_30 (EC), Jehoshaphat\_30 (EG), Jollipop\_30 (EC), Judebell\_30 (EG), KaiHaiDragon\_30 (EC), Kamashten\_24 (DE1), Keitabear\_25 (DE1), Kelcole\_26 (EG), Kewpiedoll\_24 (DE1), KimmyK\_24 (DC1), Kowalski\_29 (EC), Kozie\_26 (EI), Kroos\_24 (DE1), Kwobi\_24 (DE1), Lennon\_25 (DE1), Leonard\_24 (DE2), LilHam\_21 (DE1), Lilbeanie\_21 (DE5), LittleFortune\_31 (EC), Llemily\_28 (EG), Lonelysoil\_27 (EG), Love\_25 (DE1), Marcie\_32 (EG), Mareelih\_87 (DS), Margaery\_25 (EI), Mashley\_26 (EG), Matzah\_26 (EI), McKinley\_24 (DE1), Megan\_24 (EC), MelBins\_25 (DE2), MementoMori\_26 (EI), Merry\_30 (EC), Metamorphoo\_30 (EC), Mimi\_90 (FC), MoontowerMania\_22 (DE1), Mutzi\_24 (DC1), Namago\_28 (EG), Nicole72\_25 (EC), Nike\_28 (EG), NoodlelyBoi\_30 (EC), Nordenberg\_18 (DE1), Nubi\_22 (DC1), OneinaGillian\_27 (EG), Onika\_29 (EC), Paries\_24 (DE1), Paschalis\_29 (EC), Patbob\_84 (FC), Pepe25\_26 (EG), Phabia\_28 (EG), Phauci\_17 (DE2), Phendrix\_76 (DK), Phinally\_24 (DE2), Phinky\_34 (EG), Phlop\_22 (DC1), Phorgeous\_29 (EC), Phrampa\_77 (FC), Phrancesco\_30 (EC), PierreOrion\_30 (EC), PinkCoffee\_24 (DC1), PiperSansNom\_30 (EC), Piperis\_30 (EC), Portcullis\_22 (DC1), Pulchra\_31 (EC), PullumCavea\_22 (DC1), Quammi\_26 (EG), Quhwah\_33 (EC), Racecar\_84 (FC), Ramiel05\_29 (EC), Rasputia\_59 (GC), Ribeye\_24 (DE1), RiverRaider\_24 (DE1), RobinRose\_29 (EG), RobsFeet\_31 (EC), Rofo\_23 (DE1), RogerDodger\_25 (DC1), Romm\_29 (EG), Rowlf\_24 (EG), RubyRalph\_30 (EG), Rudy\_26 (EG), SJReid\_88 (FC), SadLad\_32 (EG), SallyK\_29 (EG), Salvador\_22 (DC1), Sanjuju\_21 (DE1), Saronaya\_23 (DE1), Savannah\_29 (EC), Savbucketdawg\_22 (DC1), SchottB\_22 (DE1), Scumberland\_31 (EC), Sedona\_25 (DE1), Selwyn23\_31 (EC), Shinji\_22 (DC1), Shivanishola\_23 (DE1), Shotgun\_29 (EC), Sitar\_25 (DE1), Sixama\_83 (DS),

Smarties\_38 (EC), SmokingBunny\_22 (DC1), Squash\_30 (EG), Statler\_30 (EG), StorminNorm\_23 (DE1), StrawberryJamm\_30 (EG), Stultus\_23 (DE1), Sunny\_30 (EC), Talia1610\_83 (FC), Tangent\_21 (DE1), Tangerine\_23 (DE1), Teehee\_29 (EG), Tempo\_27 (EG), Terij\_26 (EI), Thing3\_24 (DE1), TillyBobJoe\_22 (DC1), Tissue\_28 (EG), Togo\_22 (DC1), TurkishDelight\_21 (singleton), Twister6\_24 (DC1), Tyumbra\_28 (EC), Valary\_25 (DC1), VanDeWege\_25 (DC1), ViaConlectus\_25 (DE4), Viceroy\_27 (EG), Vivi2\_23 (DE1), Wayne3\_29 (EG), Wheelie\_27 (EG), Wilca\_27 (EG), Wizard\_22 (DC1), Yeti\_30 (EC), YungMoney\_24 (DC1), Zagie\_28 (EG), Zhafia\_31 (EG), Zitch\_26 (DE4),

#### Start 22:

- Found in 14 of 646 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 12 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2\_17 (BG), Asis\_16 (BG), BabyGotBac\_16 (BG), BayC\_16 (BG), Fizzles\_28 (EG), Maih\_16 (BG), Mischief19\_24 (BG), RainyPolka\_17 (BG), Salete\_16 (BG), TP1604\_16 (BG), Thonko\_19 (B8), Xkcd426\_22 (BG), YDN12\_17 (BG), phiAsp2\_16 (singleton),

#### Start 23:

- Found in 1 of 646 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evaa\_19 (DR),

#### Start 24:

- Found in 33 of 646 ( 5.1% ) of genes in pham
- Manual Annotations of this start: 21 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ahwei\_17 (B4), Antihero\_17 (B4), Apex\_18 (B4), Austelle\_19 (B4), BobbyK\_18 (B4), BrownCNA\_19 (B4), ChrisnMich\_17 (B4), Cooper\_18 (B4), Epah\_17 (B4), Fanaw\_18 (B4), Fortunato\_18 (B4), Frederick\_18 (B4), GinPorsche\_17 (B4), Hally898\_17 (B4), Hangman\_18 (B4), Heath\_18 (B4), Hydro\_18 (B4), JAMaL\_18 (B4), JaguarMi\_19 (B4), Lambano\_17 (B4), Lolalove\_18 (B4), Magpie\_18 (B4), Mithril\_18 (B4), Mudslide\_18 (B4), Nanao\_17 (B4), Poster\_17 (B4), Prince\_18 (B4), QueenPie\_18 (B4), RawrgerThat\_18 (B4), VioletZ\_18 (B4), Waleliano\_18 (B4), Xincheng\_18 (B4), Zemanar\_19 (B4),

#### Start 25:

- Found in 300 of 646 ( 46.4% ) of genes in pham
- Manual Annotations of this start: 282 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABU\_18 (B1), AbsoluteMadLad\_17 (B1), Adriana\_18 (B1), Aelin\_17 (B1), AlanGrant\_19 (B4), AltPhacts\_18 (B1), Altwerkus\_17 (B1), AnClar\_18 (DR), AnarQue\_20 (DR), Anderson\_18 (B1), Andre\_18 (B1), Antonia\_17 (B1), Apizium\_17 (B1), Ashraf\_17 (B1), Badfish\_18 (B1), Banjo\_17 (B1), Basato\_19 (B1), BatteryCK\_17 (B1), Beaglebox\_17 (B1), BiggityBass\_17 (DR), BirdsNest\_23 (B13), Bishoperium\_17 (B1), BlackStallion\_18 (B1), BlueHusk\_18 (B1), Bluephacebaby\_17 (B1), BobRoss2024\_17 (DR), Boehler\_18 (B1), Brilliant\_18 (B1), Buckeye\_18 (B1), Burr\_17 (B1), CaiB\_20 (DR), CamL\_18 (B1), CampRoach\_18 (B1), Cannibal\_18 (B1), Carthage\_17 (B1), Chaelin\_17 (B1), Chah\_18 (B1), Charles1\_18 (B1), CharlieGBrown\_17 (B1),

CharlottesWeb\_18 (DR), CheetO\_18 (B1), Cher\_17 (B1), Childish\_17 (B1), Chorkpop\_18 (B1), Chunky\_18 (B1), Chute\_17 (B1), CloverMinnie\_20 (DR), Cobra\_18 (B1), Colbert\_18 (B1), Coldpizza\_20 (DR), Coletti\_17 (B1), Cornobble\_17 (B1), Cosmolli16\_17 (B1), Craff\_18 (B1), Crownjwl\_18 (B1), DaddyDaniels\_18 (B1), Daffy\_18 (B1), Daka\_18 (B1), Dati\_18 (B1), DelRivs\_17 (B1), Derpp\_17 (B1), Dice\_17 (B1), Dingo\_18 (B1), Dione\_17 (B1), DirtJuice\_18 (B1), Doddsville\_18 (B1), DoesntMatter\_18 (B1), DonSanchon\_17 (B1), DuchessDung\_17 (B1), Duggie\_17 (B1), Durga\_18 (B1), Emiris\_18 (B1), EmpTee\_18 (B1), Eremos\_18 (B1), Etaye\_18 (B1), Eugenia\_18 (B1), Fang\_18 (B1), FluffyNinja\_18 (B1), Fozzie\_17 (B1), Frankicide\_18 (B1), Freya\_17 (B1), FriarPreacher\_18 (B1), Fringe\_18 (B1), FugateOSU\_17 (B1), Gareth\_17 (B1), GeneCoco\_18 (B1), Giraffe\_18 (B1), Gophee\_18 (B1), Grand2040\_17 (B1), Gwilliam\_18 (B1), Gyarad\_0018 (B1), HSavage\_18 (B1), Haimas\_18 (B1), Haleema\_17 (B1), Hamish\_18 (B1), Hartsy\_18 (B1), Harvey\_18 (B1), Hashim76\_23 (B13), Held\_18 (B1), HenryJackson\_17 (B1), Hertubise\_18 (B1), Hetaeria\_18 (B1), HighStump\_17 (B1), Hocus\_17 (B1), Horchata\_18 (B1), ImtiyazSitla\_17 (B1), Inchworm\_18 (B1), Inverness\_18 (B1), Iridoclysis\_18 (B1), IsaacEli\_18 (B1), JDog\_17 (B1), JacAttac\_18 (B1), JakeO\_17 (B1), JangoPhett\_18 (B1), Jillium\_17 (B1), Jiminy\_17 (B1), Jiraiya\_18 (B1), KLucky39\_18 (B1), Kahve\_17 (B1), Kailash\_18 (B1), Katniss\_18 (B1), Keitherie\_18 (B1), Kikipoo\_18 (B1), Kimbrough\_18 (B1), KingTut\_17 (B1), KingVeVeVe\_18 (B1), KlimbOn\_18 (B1), Kloppinator\_18 (B1), Kwadwo\_17 (B1), Kwksand96\_17 (B1), Labeouficaum\_17 (B1), LasagnaCat\_18 (B1), Lasso\_18 (B1), LeeLot\_18 (B1), Lego3393\_18 (B1), Legolas\_17 (B1), LeiMonet\_18 (B1), LemonSlice\_18 (B1), Longacauda\_17 (B1), Lopsy\_17 (B1), LostAndPhound\_17 (B1), LuckyMarjie\_17 (B1), Lulumae\_17 (B1), Lulwa\_18 (B1), Lumine\_17 (B1), MRabcd\_17 (B1), Mag7\_17 (B1), Magic8\_18 (B1), MakoManhole\_20 (DR), Mana\_17 (B1), Manad\_17 (B1), Mariokart\_18 (DR), Maru\_17 (B1), Maskar\_17 (B1), Matalotodo\_18 (B1), Mcshane\_17 (B1), Mecca\_17 (B1), Megamind20\_18 (B1), Megatron\_18 (B1), Melc17\_18 (B1), MelsMeow\_17 (B1), Mesh1\_18 (B1), MichaelPhcott\_17 (B1), Mikota\_18 (B1), MiniBoss\_18 (B1), MitKao\_18 (B1), Morgushi\_18 (B1), Morty\_18 (B1), Mosaic\_17 (B1), MossRose\_20 (DR), MrPhizzler\_17 (B1), Mulan\_17 (B1), Murdoc\_18 (B1), Mutante\_17 (B1), NHagos\_18 (DR), Nacho\_0018 (B1), Newman\_18 (B1), Nicole21\_18 (B1), Nigel\_16 (B4), Numberten\_18 (B1), Nyala\_17 (B1), OSmaximus\_18 (B1), Olak\_17 (B1), Oline\_17 (B1), Olive\_18 (B1), OliverWalter\_18 (B1), Omniscient\_18 (B1), Oosterbaan\_18 (B1), Orfeu\_17 (B1), Orion\_18 (B1), Orwigg\_18 (B1), PG1\_18 (B1), Pacifista\_17 (B1), Phamished\_18 (B1), Phareon\_18 (B1), PhatCats2014\_18 (B1), PhatLouie\_18 (B1), PhenghisKhan\_17 (B1), Pherdinand\_18 (B1), Phergie\_17 (B1), Phipps\_18 (B1), Phleuron\_17 (B1), PhrankReynolds\_17 (B1), PhrodoBaggins\_17 (B1), Phunky\_18 (B1), Piglet\_0017 (B1), Pine5\_20 (singleton), PinheadLarry\_18 (B1), Pinkman\_17 (B1), Pipsqueak\_18 (B1), Placalicious\_17 (B1), Plmatters\_18 (B1), Podrick\_18 (B1), Pops\_18 (B1), Potter\_17 (B1), Prickles\_18 (B1), ProfessorX\_18 (B1), Puhltonio\_18 (B1), QueenBeane\_18 (B1), Quisquiliae\_18 (B1), RedMaple\_17 (B1), Ricotta\_17 (B1), Riggan\_18 (B1), Rimu\_17 (B1), Robyn\_17 (B1), Roliet\_18 (B1), Roscoe\_19 (B1), Roy17\_18 (B1), SDcharge11\_18 (B1), Samaymay\_18 (B1), SassyCat97\_17 (B1), Schadenfreude\_17 (B1), Schueller\_17 (B1), Scoot17C\_18 (B1), Scrick\_17 (B1), Selr12\_18 (B1), Serendipity\_18 (B1), Serpentine\_0018 (B1), Sheila\_18 (B1), ShiVal\_18 (B1), Sigman\_18 (B1), SilverBell\_18 (B1), Simielle\_17 (B1), Sisko\_18 (DR), Skippy\_18 (B1), Slatt\_18 (B1), Soile\_18 (B1), Solosis\_17 (B1), Sophia\_17 (B1), Soto\_18 (B1), Sour\_21 (DR), Spartan300\_18 (B1), Squid\_18 (B1), Squiggle\_18 (B1), Stinger\_16 (B4), Struggle\_17 (B1), Suffolk\_18 (B1), Surely\_18 (B1), Swiphy\_18 (B1), Swish\_18 (B1), TPA2\_27 (singleton), TallGrassMM\_18 (B1), Telesworld\_17 (B1), Thora\_18 (B1), ThreeOh3D2\_18 (B1), Thunderbird\_17 (B1), Timmi\_17 (B1),

TomBombadil\_18 (B1), Tomlarah\_18 (B1), Toni\_17 (B1), Tooj\_18 (B1), True\_17 (B1), Trypo\_18 (B1), TyrionL\_17 (B1), UAch1\_18 (B1), UncleHowie\_18 (B1), Usavi\_18 (B1), Vaishali24\_17 (B1), Valjean\_18 (B1), Vaticameos\_18 (B1), Veritas\_17 (B1), Vincenzo\_19 (B4), Virapocalypse\_18 (B1), Virgeve\_17 (B1), Vista\_18 (B1), Vivaldi\_18 (B1), Vortex\_18 (B1), Wallhey\_17 (B1), Waterdiva\_18 (B1), Weher20\_18 (B1), Windsor\_17 (B1), Wooper\_20 (DR), Xavier\_17 (B1), Yago84\_18 (DR), Yoshand\_18 (B1), YouGoGlencoco\_18 (B1), Zaider\_19 (B1), Zelda\_18 (B1), Zenteno07\_23 (B13), Zonia\_18 (B1),

#### Start 26:

- Found in 5 of 646 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 5 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Axumite\_18 (DR), Fresco\_18 (DR), Ligma\_18 (DR), LittleMunchkin\_19 (DR), Shatter\_18 (DR),

#### Start 27:

- Found in 32 of 646 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 11 of 553
- Called 50.0% of time when present
- Phage (with cluster) where this start called: 39HC\_016 (B6), CRB2\_22 (B9), Funsized\_22 (B9), Hosp\_014 (B6), Imvubu\_15 (B10), Indlovu\_18 (B11), Jolie1\_016 (B6), KarasumaRum\_22 (B5), KayaCho\_16 (B6), Knocker\_22 (B9), LilMcDreamy\_18 (B12), PenguinLover67\_21 (B9), Quesadilla\_21 (B9), Rinkes\_22 (B9), Saguaro\_20 (B7), StinkyVeggy\_22 (B5),

#### Start 28:

- Found in 2 of 646 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 2 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sejanus\_17 (AD), Tonitrus\_35 (singleton),

#### Start 29:

- Found in 7 of 646 ( 1.1% ) of genes in pham
- Manual Annotations of this start: 3 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clawz\_49 (CP), ColdSoup\_50 (CP), DonTron\_49 (CP), Jollymon\_50 (CP), KingstonB\_50 (CP), Soos\_45 (CP), Sting\_48 (CP),

#### Start 33:

- Found in 67 of 646 ( 10.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 7.5% of time when present
- Phage (with cluster) where this start called: Altheas\_30 (EG), EverythinBagel\_28 (EG), FrankDeliGuy\_26 (EG), Kyva\_30 (EG), MorillMayhem\_27 (EG),

#### Start 36:

- Found in 89 of 646 ( 13.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 2.2% of time when present
- Phage (with cluster) where this start called: Abblin\_24 (DE4), Natkenzie\_24 (DE4),



Start 39:

- Found in 25 of 646 ( 3.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Scioto\_24 (DE4),

Start 51:

- Found in 48 of 646 ( 7.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 2.1% of time when present
- Phage (with cluster) where this start called: Sillytadpoles\_29 (EG),

**Summary by clusters:**

There are 36 clusters represented in this pham: singleton, BG, DK, AP2, AP3, DE, AP4, FC, B12, B13, B10, B11, DR, DS, AP1, EI, AD, EG, EC, AP, GC, CP, DC2, DC1, DE1, DE2, DE3, DE4, DE5, B4, B5, B6, B7, B1, B8, B9,

Info for manual annotations of cluster AD:

- Start number 28 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster AP:

- Start number 16 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 16 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 16 was manually annotated 5 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 16 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 16 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster B1:

- Start number 25 was manually annotated 263 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 27 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 27 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 27 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 25 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B4:

- Start number 24 was manually annotated 21 times for cluster B4.
- Start number 25 was manually annotated 4 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 13 was manually annotated 9 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 27 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 27 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 22 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 27 was manually annotated 6 times for cluster B9.

Info for manual annotations of cluster BG:

- Start number 22 was manually annotated 10 times for cluster BG.

Info for manual annotations of cluster CP:

- Start number 29 was manually annotated 3 times for cluster CP.

Info for manual annotations of cluster DC1:

- Start number 21 was manually annotated 28 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 21 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 20 was manually annotated 2 times for cluster DE1.
- Start number 21 was manually annotated 42 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 21 was manually annotated 8 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 20 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 20 was manually annotated 7 times for cluster DE4.
- Start number 21 was manually annotated 2 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 21 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DK:

- Start number 21 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DR:

- Start number 23 was manually annotated 1 time for cluster DR.

- Start number 25 was manually annotated 13 times for cluster DR.
- Start number 26 was manually annotated 5 times for cluster DR.

Info for manual annotations of cluster DS:

- Start number 21 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster EC:

- Start number 21 was manually annotated 40 times for cluster EC.

Info for manual annotations of cluster EG:

- Start number 21 was manually annotated 37 times for cluster EG.
- Start number 22 was manually annotated 1 time for cluster EG.

Info for manual annotations of cluster EI:

- Start number 21 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster FC:

- Start number 21 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster GC:

- Start number 21 was manually annotated 2 times for cluster GC.

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

Gene: 39HC\_016 Start: 14982, Stop: 15791, Start Num: 27

Candidate Starts for 39HC\_016:

(14, 14955), (19, 14973), (Start: 27 @14982 has 11 MA's), (53, 15111), (54, 15114), (71, 15225), (73, 15240), (74, 15246), (97, 15369), (127, 15537), (129, 15552), (130, 15567), (157, 15687), (163, 15708), (174, 15765), (176, 15780),

Gene: 40BC\_016 Start: 14955, Stop: 15791, Start Num: 14

Candidate Starts for 40BC\_016:

(14, 14955), (19, 14973), (Start: 27 @14982 has 11 MA's), (53, 15111), (54, 15114), (71, 15225), (73, 15240), (74, 15246), (97, 15369), (127, 15537), (129, 15552), (130, 15567), (157, 15687), (163, 15708), (174, 15765), (176, 15780),

Gene: ABU\_18 Start: 14691, Stop: 15491, Start Num: 25

Candidate Starts for ABU\_18:

(Start: 25 @14691 has 282 MA's), (41, 14754), (52, 14811), (53, 14820), (54, 14823), (68, 14919), (74, 14955), (97, 15072), (120, 15204), (123, 15219), (127, 15240), (130, 15270), (149, 15339), (157, 15390), (163, 15411), (173, 15465), (174, 15468),

Gene: APunk\_26 Start: 19712, Stop: 20398, Start Num: 20

Candidate Starts for APunk\_26:

(Start: 20 @19712 has 16 MA's), (36, 19751), (39, 19766), (50, 19826), (93, 20081), (151, 20348), (156, 20384),

Gene: AWGoat\_22 Start: 16832, Stop: 17728, Start Num: 16

Candidate Starts for AWGoat\_22:

(Start: 16 @16832 has 12 MA's), (36, 16874), (38, 16886), (46, 16928), (54, 16973), (59, 17006), (66, 17063), (81, 17144), (89, 17189), (93, 17207), (115, 17273), (119, 17291), (123, 17318), (137, 17390),

(146, 17414), (166, 17522),

Gene: Abblin\_24 Start: 18964, Stop: 19614, Start Num: 36

Candidate Starts for Abblin\_24:

(6, 18841), (8, 18868), (Start: 20 @18925 has 16 MA's), (36, 18964), (39, 18979), (50, 19039), (93, 19294), (151, 19561), (156, 19597),

Gene: AbsoluteMadLad\_17 Start: 14695, Stop: 15495, Start Num: 25

Candidate Starts for AbsoluteMadLad\_17:

(Start: 25 @14695 has 282 MA's), (41, 14758), (52, 14815), (53, 14824), (54, 14827), (68, 14923), (74, 14959), (97, 15076), (120, 15208), (123, 15223), (127, 15244), (130, 15274), (149, 15343), (157, 15394), (163, 15415), (173, 15469), (174, 15472),

Gene: Abt2graduatex2\_17 Start: 17436, Stop: 18131, Start Num: 22

Candidate Starts for Abt2graduatex2\_17:

(Start: 22 @17436 has 12 MA's), (35, 17466), (36, 17469), (39, 17484), (48, 17526), (49, 17538), (52, 17553), (54, 17565), (55, 17571), (62, 17619), (74, 17697), (83, 17742), (96, 17808), (111, 17868), (124, 17928), (139, 18009), (143, 18021), (149, 18057), (151, 18066),

Gene: Acadian\_20 Start: 16504, Stop: 17340, Start Num: 13

Candidate Starts for Acadian\_20:

(2, 16393), (Start: 13 @16504 has 9 MA's), (Start: 27 @16537 has 11 MA's), (48, 16630), (50, 16645), (51, 16651), (53, 16666), (54, 16669), (57, 16687), (74, 16801), (127, 17086), (130, 17116), (145, 17155), (149, 17185), (163, 17257),

Gene: Adriana\_18 Start: 14693, Stop: 15493, Start Num: 25

Candidate Starts for Adriana\_18:

(Start: 25 @14693 has 282 MA's), (41, 14756), (52, 14813), (53, 14822), (54, 14825), (68, 14921), (74, 14957), (97, 15074), (120, 15206), (123, 15221), (127, 15242), (130, 15272), (149, 15341), (157, 15392), (163, 15413), (173, 15467), (174, 15470),

Gene: Aelin\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Aelin\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Affeca\_23 Start: 18821, Stop: 19516, Start Num: 21

Candidate Starts for Affeca\_23:

(Start: 21 @18821 has 179 MA's), (30, 18830), (36, 18860), (52, 18947), (64, 19022), (83, 19136), (93, 19193), (95, 19205), (103, 19226), (131, 19379), (139, 19403), (156, 19496), (160, 19511),

Gene: Ahwei\_17 Start: 15373, Stop: 16179, Start Num: 24

Candidate Starts for Ahwei\_17:

(Start: 24 @15373 has 21 MA's), (41, 15436), (53, 15502), (54, 15505), (57, 15523), (71, 15616), (74, 15637), (79, 15658), (104, 15793), (120, 15886), (130, 15952), (143, 15985), (144, 15988), (149, 16021), (157, 16072), (163, 16093), (174, 16150),

Gene: Ailee\_23 Start: 18735, Stop: 19430, Start Num: 21

Candidate Starts for Ailee\_23:

(Start: 21 @18735 has 179 MA's), (30, 18744), (36, 18774), (52, 18861), (64, 18936), (83, 19050), (93, 19107), (95, 19119), (103, 19140), (131, 19293), (156, 19410), (160, 19425),

Gene: AlanGrant\_19 Start: 17209, Stop: 18015, Start Num: 25

Candidate Starts for AlanGrant\_19:

(9, 17149), (Start: 25 @17209 has 282 MA's), (41, 17272), (52, 17329), (54, 17341), (57, 17359), (74, 17473), (79, 17494), (120, 17722), (127, 17758), (130, 17788), (144, 17824), (149, 17857), (152, 17869), (157, 17908), (174, 17986),

Gene: Ali17\_22 Start: 18134, Stop: 18820, Start Num: 21

Candidate Starts for Ali17\_22:

(Start: 21 @18134 has 179 MA's), (36, 18173), (41, 18203), (52, 18260), (71, 18383), (74, 18404), (83, 18449), (93, 18503), (130, 18686), (132, 18692), (151, 18770), (153, 18776),

Gene: AltPhacts\_18 Start: 14688, Stop: 15488, Start Num: 25

Candidate Starts for AltPhacts\_18:

(Start: 25 @14688 has 282 MA's), (41, 14751), (52, 14808), (53, 14817), (54, 14820), (68, 14916), (74, 14952), (97, 15069), (120, 15201), (123, 15216), (127, 15237), (130, 15267), (149, 15336), (157, 15387), (163, 15408), (173, 15462), (174, 15465),

Gene: Altheas\_30 Start: 17688, Stop: 18611, Start Num: 33

Candidate Starts for Altheas\_30:

(Start: 21 @17664 has 179 MA's), (33, 17688), (42, 17736), (43, 17739), (119, 18150), (130, 18231), (131, 18234), (149, 18300), (157, 18351), (167, 18390), (172, 18420), (180, 18456), (183, 18492), (190, 18579),

Gene: Altwerkus\_17 Start: 14388, Stop: 15188, Start Num: 25

Candidate Starts for Altwerkus\_17:

(Start: 25 @14388 has 282 MA's), (41, 14451), (52, 14508), (53, 14517), (54, 14520), (68, 14616), (74, 14652), (97, 14769), (120, 14901), (123, 14916), (127, 14937), (130, 14967), (149, 15036), (157, 15087), (163, 15108), (173, 15162), (174, 15165),

Gene: AluminumJesus\_26 Start: 17022, Stop: 17969, Start Num: 21

Candidate Starts for AluminumJesus\_26:

(Start: 21 @17022 has 179 MA's), (33, 17046), (42, 17094), (51, 17142), (130, 17589), (131, 17592), (157, 17709), (180, 17814),

Gene: AnClar\_18 Start: 15482, Stop: 16294, Start Num: 25

Candidate Starts for AnClar\_18:

(7, 15413), (11, 15431), (Start: 25 @15482 has 282 MA's), (33, 15500), (48, 15575), (54, 15614), (74, 15746), (79, 15767), (90, 15833), (127, 16028), (149, 16130), (153, 16145), (163, 16202), (179, 16283),

Gene: AnarQue\_20 Start: 16103, Stop: 16912, Start Num: 25

Candidate Starts for AnarQue\_20:

(Start: 25 @16103 has 282 MA's), (33, 16121), (48, 16196), (54, 16235), (57, 16253), (60, 16280), (74, 16367), (79, 16388), (81, 16406), (83, 16412), (90, 16454), (127, 16649), (149, 16751), (163, 16823),

Gene: Anderson\_18 Start: 14684, Stop: 15484, Start Num: 25

Candidate Starts for Anderson\_18:

(Start: 25 @14684 has 282 MA's), (41, 14747), (52, 14804), (53, 14813), (54, 14816), (68, 14912), (74, 14948), (97, 15065), (120, 15197), (123, 15212), (127, 15233), (130, 15263), (149, 15332), (157, 15383), (163, 15404), (173, 15458), (174, 15461),

Gene: Andre\_18 Start: 14682, Stop: 15482, Start Num: 25

Candidate Starts for Andre\_18:

(Start: 25 @14682 has 282 MA's), (41, 14745), (52, 14802), (53, 14811), (54, 14814), (68, 14910), (74, 14946), (97, 15063), (120, 15195), (123, 15210), (127, 15231), (130, 15261), (149, 15330), (157, 15381), (163, 15402), (173, 15456), (174, 15459),

Gene: Angelicage\_23 Start: 19244, Stop: 19939, Start Num: 21

Candidate Starts for Angelicage\_23:

(Start: 21 @19244 has 179 MA's), (30, 19253), (36, 19283), (52, 19370), (64, 19445), (83, 19559), (93, 19616), (95, 19628), (103, 19649), (131, 19802), (139, 19826), (156, 19919), (160, 19934),

Gene: Antares\_30 Start: 17515, Stop: 18195, Start Num: 21

Candidate Starts for Antares\_30:

(Start: 21 @17515 has 179 MA's), (45, 17602), (50, 17626), (61, 17701), (64, 17713), (71, 17761), (82, 17821), (111, 17950), (115, 17962), (123, 18010), (130, 18064), (149, 18124), (162, 18184),

Gene: Antihero\_17 Start: 15373, Stop: 16179, Start Num: 24

Candidate Starts for Antihero\_17:

(Start: 24 @15373 has 21 MA's), (41, 15436), (53, 15502), (54, 15505), (57, 15523), (71, 15616), (74, 15637), (79, 15658), (104, 15793), (120, 15886), (130, 15952), (143, 15985), (144, 15988), (149, 16021), (157, 16072), (163, 16093), (174, 16150),

Gene: Antonia\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Antonia\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Apex\_18 Start: 16618, Stop: 17424, Start Num: 24

Candidate Starts for Apex\_18:

(Start: 24 @16618 has 21 MA's), (41, 16681), (53, 16747), (54, 16750), (57, 16768), (71, 16861), (74, 16882), (79, 16903), (93, 16981), (104, 17038), (120, 17131), (144, 17233), (149, 17266), (152, 17278), (153, 17281), (157, 17317),

Gene: Apizium\_17 Start: 14428, Stop: 15228, Start Num: 25

Candidate Starts for Apizium\_17:

(Start: 25 @14428 has 282 MA's), (41, 14491), (52, 14548), (53, 14557), (54, 14560), (68, 14656), (74, 14692), (97, 14809), (120, 14941), (123, 14956), (127, 14977), (130, 15007), (149, 15076), (157, 15127), (163, 15148), (173, 15202), (174, 15205),

Gene: Ariadne\_38 Start: 19203, Stop: 19883, Start Num: 21

Candidate Starts for Ariadne\_38:

(Start: 21 @19203 has 179 MA's), (42, 19275), (45, 19290), (50, 19314), (61, 19389), (64, 19401), (66, 19428), (71, 19449), (82, 19509), (111, 19638), (115, 19650), (123, 19698), (130, 19752), (149, 19812),

Gene: Arri\_25 Start: 15837, Stop: 16523, Start Num: 21

Candidate Starts for Arri\_25:

(Start: 21 @15837 has 179 MA's), (48, 15936), (74, 16107), (75, 16110), (98, 16230), (149, 16461),

Gene: Ashertheman\_24 Start: 18310, Stop: 19005, Start Num: 21

Candidate Starts for Ashertheman\_24:

(8, 18250), (Start: 21 @18310 has 179 MA's), (36, 18349), (64, 18511), (93, 18682), (95, 18694), (156, 18985), (160, 19000),

Gene: Ashraf\_17 Start: 14246, Stop: 15046, Start Num: 25

Candidate Starts for Ashraf\_17:

(Start: 25 @14246 has 282 MA's), (41, 14309), (52, 14366), (53, 14375), (54, 14378), (68, 14474), (74, 14510), (97, 14627), (120, 14759), (123, 14774), (127, 14795), (130, 14825), (149, 14894), (157, 14945), (163, 14966), (173, 15020), (174, 15023),

Gene: Asis\_16 Start: 16946, Stop: 17644, Start Num: 22

Candidate Starts for Asis\_16:

(Start: 22 @16946 has 12 MA's), (35, 16976), (39, 16994), (48, 17036), (49, 17048), (52, 17063), (54, 17075), (71, 17186), (74, 17207), (83, 17252), (96, 17318), (108, 17363), (124, 17438), (130, 17486), (131, 17489), (139, 17519), (143, 17531), (149, 17567), (162, 17633),

Gene: Atuin\_81 Start: 49765, Stop: 50412, Start Num: 21

Candidate Starts for Atuin\_81:

(Start: 21 @49765 has 179 MA's), (74, 50035), (113, 50215), (135, 50326),

Gene: Austelle\_19 Start: 17074, Stop: 17880, Start Num: 24

Candidate Starts for Austelle\_19:

(Start: 24 @17074 has 21 MA's), (41, 17137), (53, 17203), (54, 17206), (57, 17224), (71, 17317), (74, 17338), (79, 17359), (93, 17437), (104, 17494), (120, 17587), (144, 17689), (149, 17722), (152, 17734), (153, 17737), (157, 17773),

Gene: Axumite\_18 Start: 14690, Stop: 15502, Start Num: 26

Candidate Starts for Axumite\_18:

(Start: 26 @14690 has 5 MA's), (33, 14708), (48, 14783), (52, 14810), (54, 14822), (60, 14867), (74, 14954), (79, 14975), (120, 15200), (126, 15230), (127, 15236), (149, 15338), (163, 15410), (174, 15467),

Gene: BabyDotz\_27 Start: 17291, Stop: 18238, Start Num: 21

Candidate Starts for BabyDotz\_27:

(Start: 21 @17291 has 179 MA's), (33, 17315), (42, 17363), (51, 17411), (130, 17858), (131, 17861), (157, 17978), (180, 18083),

Gene: BabyGotBac\_16 Start: 16946, Stop: 17644, Start Num: 22

Candidate Starts for BabyGotBac\_16:

(Start: 22 @16946 has 12 MA's), (35, 16976), (39, 16994), (48, 17036), (49, 17048), (52, 17063), (54, 17075), (71, 17186), (74, 17207), (83, 17252), (96, 17318), (108, 17363), (124, 17438), (130, 17486), (131, 17489), (139, 17519), (143, 17531), (149, 17567), (162, 17633),

Gene: Baddon\_23 Start: 19126, Stop: 19821, Start Num: 21

Candidate Starts for Baddon\_23:

(Start: 21 @19126 has 179 MA's), (36, 19165), (64, 19327), (93, 19498), (95, 19510), (131, 19684), (156, 19801), (160, 19816),

Gene: Badfish\_18 Start: 14717, Stop: 15517, Start Num: 25

Candidate Starts for Badfish\_18:

(Start: 25 @14717 has 282 MA's), (41, 14780), (52, 14837), (53, 14846), (54, 14849), (68, 14945), (74, 14981), (97, 15098), (120, 15230), (123, 15245), (127, 15266), (130, 15296), (149, 15365), (157, 15416), (163, 15437), (173, 15491), (174, 15494),

Gene: Bae\_20 Start: 16638, Stop: 17474, Start Num: 13

Candidate Starts for Bae\_20:

(1, 16467), (Start: 13 @16638 has 9 MA's), (Start: 27 @16671 has 11 MA's), (48, 16764), (50, 16779), (53, 16800), (54, 16803), (57, 16821), (74, 16935), (127, 17220), (130, 17250), (149, 17319), (157, 17370), (163, 17391),

Gene: Bakery\_23 Start: 15025, Stop: 15711, Start Num: 21

Candidate Starts for Bakery\_23:

(Start: 21 @15025 has 179 MA's), (48, 15124), (74, 15295), (75, 15298), (129, 15559), (139, 15601), (148, 15646), (149, 15649),

Gene: Banjo\_17 Start: 14395, Stop: 15195, Start Num: 25

Candidate Starts for Banjo\_17:

(Start: 25 @14395 has 282 MA's), (41, 14458), (52, 14515), (53, 14524), (54, 14527), (68, 14623), (74, 14659), (97, 14776), (120, 14908), (123, 14923), (127, 14944), (130, 14974), (149, 15043), (157, 15094), (163, 15115), (173, 15169), (174, 15172),

Gene: Barb\_24 Start: 15824, Stop: 16510, Start Num: 21

Candidate Starts for Barb\_24:

(Start: 21 @15824 has 179 MA's), (48, 15923), (74, 16094), (75, 16097), (98, 16217), (148, 16445), (149, 16448),

Gene: Barsten\_24 Start: 18741, Stop: 19436, Start Num: 21

Candidate Starts for Barsten\_24:

(Start: 21 @18741 has 179 MA's), (30, 18750), (36, 18780), (52, 18867), (64, 18942), (71, 18990), (83, 19056), (93, 19113), (95, 19125), (103, 19146), (131, 19299), (156, 19416), (160, 19431),

Gene: Basato\_19 Start: 14921, Stop: 15721, Start Num: 25

Candidate Starts for Basato\_19:

(Start: 25 @14921 has 282 MA's), (41, 14984), (52, 15041), (53, 15050), (54, 15053), (68, 15149), (74, 15185), (97, 15302), (120, 15434), (123, 15449), (127, 15470), (130, 15500), (149, 15569), (157, 15620), (163, 15641), (173, 15695), (174, 15698),

Gene: BatteryCK\_17 Start: 14252, Stop: 15052, Start Num: 25

Candidate Starts for BatteryCK\_17:

(Start: 25 @14252 has 282 MA's), (41, 14315), (52, 14372), (53, 14381), (54, 14384), (68, 14480), (74, 14516), (97, 14633), (120, 14765), (123, 14780), (127, 14801), (130, 14831), (149, 14900), (157, 14951), (173, 15026), (174, 15029),

Gene: Baumdotcom\_23 Start: 17926, Stop: 18621, Start Num: 21

Candidate Starts for Baumdotcom\_23:

(8, 17866), (Start: 21 @17926 has 179 MA's), (36, 17965), (64, 18127), (93, 18298), (95, 18310), (156, 18601), (160, 18616),

Gene: BayC\_16 Start: 16946, Stop: 17644, Start Num: 22

Candidate Starts for BayC\_16:

(Start: 22 @16946 has 12 MA's), (35, 16976), (39, 16994), (48, 17036), (49, 17048), (52, 17063), (54, 17075), (71, 17186), (74, 17207), (83, 17252), (96, 17318), (108, 17363), (124, 17438), (130, 17486), (131, 17489), (139, 17519), (143, 17531), (149, 17567), (162, 17633),

Gene: Beagle\_30 Start: 17252, Stop: 18172, Start Num: 16

Candidate Starts for Beagle\_30:

(Start: 16 @17252 has 12 MA's), (46, 17351), (48, 17357), (49, 17369), (52, 17384), (71, 17507), (79, 17549), (89, 17612), (111, 17708), (116, 17723), (125, 17774), (150, 17888), (151, 17894), (154, 17912), (156, 17930), (169, 17996), (186, 18092),



Gene: Beaglebox\_17 Start: 14412, Stop: 15212, Start Num: 25

Candidate Starts for Beaglebox\_17:

(Start: 25 @14412 has 282 MA's), (41, 14475), (52, 14532), (53, 14541), (54, 14544), (68, 14640), (74, 14676), (97, 14793), (120, 14925), (123, 14940), (127, 14961), (130, 14991), (149, 15060), (157, 15111), (163, 15132), (173, 15186), (174, 15189),

Gene: Belphegor\_21 Start: 17203, Stop: 17895, Start Num: 21

Candidate Starts for Belphegor\_21:

(Start: 21 @17203 has 179 MA's), (36, 17242), (52, 17329), (83, 17518), (93, 17572), (130, 17755), (151, 17839), (153, 17845), (156, 17875),

Gene: Bibwit\_24 Start: 18983, Stop: 19678, Start Num: 21

Candidate Starts for Bibwit\_24:

(Start: 21 @18983 has 179 MA's), (30, 18992), (36, 19022), (52, 19109), (64, 19184), (71, 19232), (93, 19355), (95, 19367), (103, 19388), (131, 19541), (156, 19658), (160, 19673),

Gene: BiggityBass\_17 Start: 14580, Stop: 15392, Start Num: 25

Candidate Starts for BiggityBass\_17:

(Start: 25 @14580 has 282 MA's), (33, 14598), (48, 14673), (54, 14712), (60, 14757), (74, 14844), (79, 14865), (90, 14931), (127, 15126), (149, 15228), (163, 15300), (179, 15381),

Gene: BirdInFrench\_27 Start: 16100, Stop: 17041, Start Num: 21

Candidate Starts for BirdInFrench\_27:

(Start: 21 @16100 has 179 MA's), (37, 16145), (48, 16199), (87, 16439), (131, 16667), (153, 16745), (157, 16781), (168, 16835), (188, 16979), (191, 17021),

Gene: BirdsNest\_23 Start: 15668, Stop: 16468, Start Num: 25

Candidate Starts for BirdsNest\_23:

(Start: 25 @15668 has 282 MA's), (41, 15731), (53, 15797), (54, 15800), (71, 15911), (74, 15932), (97, 16049), (104, 16088), (149, 16316), (159, 16373),

Gene: Bishoperium\_17 Start: 14401, Stop: 15201, Start Num: 25

Candidate Starts for Bishoperium\_17:

(Start: 25 @14401 has 282 MA's), (41, 14464), (52, 14521), (53, 14530), (54, 14533), (68, 14629), (74, 14665), (97, 14782), (120, 14914), (123, 14929), (127, 14950), (130, 14980), (149, 15049), (157, 15100), (163, 15121), (173, 15175), (174, 15178),

Gene: Bizzy\_24 Start: 18277, Stop: 18972, Start Num: 21

Candidate Starts for Bizzy\_24:

(Start: 21 @18277 has 179 MA's), (36, 18316), (64, 18478), (93, 18649), (95, 18661), (131, 18835), (156, 18952), (160, 18967),

Gene: Blab\_26 Start: 16947, Stop: 17894, Start Num: 21

Candidate Starts for Blab\_26:

(Start: 21 @16947 has 179 MA's), (33, 16971), (42, 17019), (51, 17067), (130, 17514), (131, 17517), (157, 17634), (180, 17739),

Gene: BlackStallion\_18 Start: 14703, Stop: 15503, Start Num: 25

Candidate Starts for BlackStallion\_18:

(Start: 25 @14703 has 282 MA's), (41, 14766), (52, 14823), (53, 14832), (54, 14835), (68, 14931), (74, 14967), (97, 15084), (120, 15216), (123, 15231), (127, 15252), (130, 15282), (149, 15351), (157, 15402), (163, 15423), (173, 15477), (174, 15480),

Gene: Bloom\_87 Start: 51166, Stop: 51822, Start Num: 21

Candidate Starts for Bloom\_87:

(Start: 21 @51166 has 179 MA's), (60, 51349), (74, 51436), (113, 51616), (120, 51652), (121, 51655),

Gene: BlueHusk\_18 Start: 14684, Stop: 15484, Start Num: 25

Candidate Starts for BlueHusk\_18:

(Start: 25 @14684 has 282 MA's), (41, 14747), (52, 14804), (53, 14813), (54, 14816), (68, 14912), (74, 14948), (97, 15065), (120, 15197), (123, 15212), (127, 15233), (130, 15263), (149, 15332), (157, 15383), (163, 15404), (173, 15458), (174, 15461),

Gene: BlueNGold\_88 Start: 44419, Stop: 45063, Start Num: 21

Candidate Starts for BlueNGold\_88:

(Start: 21 @44419 has 179 MA's), (37, 44461), (50, 44530), (113, 44866), (119, 44890), (120, 44902), (121, 44905), (128, 44944),

Gene: Bluephacebaby\_17 Start: 14401, Stop: 15201, Start Num: 25

Candidate Starts for Bluephacebaby\_17:

(Start: 25 @14401 has 282 MA's), (41, 14464), (52, 14521), (53, 14530), (54, 14533), (68, 14629), (74, 14665), (97, 14782), (120, 14914), (123, 14929), (127, 14950), (130, 14980), (149, 15049), (157, 15100), (163, 15121), (173, 15175), (174, 15178),

Gene: BobBob\_21 Start: 17644, Stop: 18339, Start Num: 21

Candidate Starts for BobBob\_21:

(Start: 21 @17644 has 179 MA's), (30, 17653), (36, 17683), (52, 17770), (64, 17845), (83, 17959), (93, 18016), (95, 18028), (103, 18049), (131, 18202), (139, 18226), (156, 18319), (160, 18334),

Gene: BobRoss2024\_17 Start: 14469, Stop: 15278, Start Num: 25

Candidate Starts for BobRoss2024\_17:

(Start: 25 @14469 has 282 MA's), (33, 14487), (48, 14562), (54, 14601), (70, 14703), (74, 14733), (79, 14754), (127, 15015), (130, 15045), (149, 15117), (163, 15189),

Gene: BobbyK\_18 Start: 16437, Stop: 17243, Start Num: 24

Candidate Starts for BobbyK\_18:

(Start: 24 @16437 has 21 MA's), (41, 16500), (53, 16566), (54, 16569), (57, 16587), (71, 16680), (74, 16701), (79, 16722), (93, 16800), (104, 16857), (120, 16950), (144, 17052), (149, 17085), (152, 17097), (153, 17100), (157, 17136),

Gene: Boehler\_18 Start: 14711, Stop: 15511, Start Num: 25

Candidate Starts for Boehler\_18:

(Start: 25 @14711 has 282 MA's), (41, 14774), (52, 14831), (53, 14840), (54, 14843), (68, 14939), (74, 14975), (97, 15092), (120, 15224), (123, 15239), (127, 15260), (130, 15290), (149, 15359), (157, 15410), (163, 15431), (173, 15485), (174, 15488),

Gene: Boopy\_89 Start: 44431, Stop: 45075, Start Num: 21

Candidate Starts for Boopy\_89:

(Start: 21 @44431 has 179 MA's), (37, 44473), (50, 44542), (113, 44878), (119, 44902), (120, 44914), (121, 44917), (128, 44956),

Gene: Brandonk123\_25 Start: 18299, Stop: 18994, Start Num: 21

Candidate Starts for Brandonk123\_25:

(Start: 21 @18299 has 179 MA's), (30, 18308), (36, 18338), (52, 18425), (64, 18500), (71, 18548), (83, 18614), (93, 18671), (95, 18683), (103, 18704), (131, 18857), (156, 18974), (160, 18989),

Gene: BrazzalePHS\_29 Start: 17310, Stop: 17990, Start Num: 21

Candidate Starts for BrazzalePHS\_29:

(Start: 21 @17310 has 179 MA's), (45, 17397), (50, 17421), (61, 17496), (64, 17508), (71, 17556), (82, 17616), (111, 17745), (115, 17757), (123, 17805), (130, 17859), (149, 17919), (162, 17979),

Gene: Brilliant\_18 Start: 14405, Stop: 15205, Start Num: 25

Candidate Starts for Brilliant\_18:

(Start: 25 @14405 has 282 MA's), (41, 14468), (52, 14525), (53, 14534), (54, 14537), (68, 14633), (74, 14669), (97, 14786), (120, 14918), (123, 14933), (127, 14954), (130, 14984), (149, 15053), (157, 15104), (163, 15125), (173, 15179), (174, 15182),

Gene: BrownCNA\_19 Start: 16691, Stop: 17497, Start Num: 24

Candidate Starts for BrownCNA\_19:

(Start: 24 @16691 has 21 MA's), (41, 16754), (53, 16820), (54, 16823), (57, 16841), (71, 16934), (74, 16955), (79, 16976), (101, 17093), (104, 17111), (120, 17204), (130, 17270), (144, 17306), (149, 17339), (152, 17351), (153, 17354), (157, 17390),

Gene: BruhMoment\_24 Start: 16745, Stop: 17665, Start Num: 16

Candidate Starts for BruhMoment\_24:

(Start: 16 @16745 has 12 MA's), (49, 16862), (52, 16877), (63, 16946), (71, 17000), (74, 17021), (79, 17042), (83, 17066), (111, 17201), (119, 17231), (130, 17312), (134, 17321), (150, 17381), (151, 17387), (156, 17423), (169, 17489),

Gene: Buckeye\_18 Start: 14719, Stop: 15519, Start Num: 25

Candidate Starts for Buckeye\_18:

(Start: 25 @14719 has 282 MA's), (41, 14782), (52, 14839), (53, 14848), (54, 14851), (68, 14947), (74, 14983), (97, 15100), (120, 15232), (123, 15247), (127, 15268), (130, 15298), (149, 15367), (157, 15418), (163, 15439), (173, 15493), (174, 15496),

Gene: Burr\_17 Start: 14401, Stop: 15201, Start Num: 25

Candidate Starts for Burr\_17:

(Start: 25 @14401 has 282 MA's), (41, 14464), (52, 14521), (53, 14530), (54, 14533), (68, 14629), (74, 14665), (97, 14782), (120, 14914), (123, 14929), (127, 14950), (130, 14980), (149, 15049), (157, 15100), (163, 15121), (173, 15175), (174, 15178),

Gene: Busephilis\_29 Start: 17246, Stop: 17926, Start Num: 21

Candidate Starts for Busephilis\_29:

(Start: 21 @17246 has 179 MA's), (45, 17333), (50, 17357), (61, 17432), (64, 17444), (71, 17492), (82, 17552), (111, 17681), (115, 17693), (123, 17741), (130, 17795), (149, 17855),

Gene: CRB2\_22 Start: 17928, Stop: 18728, Start Num: 27

Candidate Starts for CRB2\_22:

(Start: 27 @17928 has 11 MA's), (41, 17994), (48, 18024), (54, 18063), (61, 18114), (71, 18174), (72, 18186), (74, 18195), (79, 18216), (82, 18237), (90, 18282), (115, 18414), (132, 18516), (149, 18579), (157, 18624), (176, 18717),

Gene: CaiB\_20 Start: 16088, Stop: 16897, Start Num: 25

Candidate Starts for CaiB\_20:

(Start: 25 @16088 has 282 MA's), (33, 16106), (48, 16181), (54, 16220), (60, 16265), (74, 16352), (79, 16373), (81, 16391), (83, 16397), (90, 16439), (127, 16634), (149, 16736), (163, 16808), (174, 16865),

Gene: CamL\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for CamL\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: CampRoach\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for CampRoach\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: CandC\_26 Start: 15681, Stop: 16622, Start Num: 21

Candidate Starts for CandC\_26:

(Start: 21 @15681 has 179 MA's), (37, 15726), (87, 16020), (123, 16191), (130, 16245), (131, 16248), (153, 16326), (166, 16395), (167, 16401), (168, 16416), (188, 16560),

Gene: Cannibal\_18 Start: 14684, Stop: 15484, Start Num: 25

Candidate Starts for Cannibal\_18:

(Start: 25 @14684 has 282 MA's), (41, 14747), (52, 14804), (53, 14813), (54, 14816), (68, 14912), (74, 14948), (97, 15065), (120, 15197), (123, 15212), (127, 15233), (130, 15263), (149, 15332), (157, 15383), (163, 15404), (173, 15458), (174, 15461),

Gene: Carthage\_17 Start: 14362, Stop: 15162, Start Num: 25

Candidate Starts for Carthage\_17:

(Start: 25 @14362 has 282 MA's), (41, 14425), (52, 14482), (53, 14491), (54, 14494), (68, 14590), (74, 14626), (97, 14743), (120, 14875), (123, 14890), (127, 14911), (130, 14941), (149, 15010), (157, 15061), (163, 15082), (173, 15136), (174, 15139),

Gene: Casend\_29 Start: 17700, Stop: 18647, Start Num: 21

Candidate Starts for Casend\_29:

(Start: 21 @17700 has 179 MA's), (33, 17724), (42, 17772), (51, 17820), (131, 18270), (157, 18387), (180, 18492), (187, 18567),

Gene: ChadMasterC\_23 Start: 18709, Stop: 19404, Start Num: 21

Candidate Starts for ChadMasterC\_23:

(Start: 21 @18709 has 179 MA's), (30, 18718), (36, 18748), (52, 18835), (64, 18910), (71, 18958), (93, 19081), (95, 19093), (103, 19114), (131, 19267), (156, 19384),

Gene: Chaelin\_17 Start: 14366, Stop: 15166, Start Num: 25

Candidate Starts for Chaelin\_17:

(Start: 25 @14366 has 282 MA's), (41, 14429), (52, 14486), (53, 14495), (54, 14498), (68, 14594), (74, 14630), (97, 14747), (120, 14879), (123, 14894), (127, 14915), (130, 14945), (149, 15014), (157, 15065), (163, 15086), (173, 15140), (174, 15143),

Gene: Chah\_18 Start: 14718, Stop: 15518, Start Num: 25

Candidate Starts for Chah\_18:

(Start: 25 @14718 has 282 MA's), (41, 14781), (52, 14838), (53, 14847), (54, 14850), (68, 14946), (74, 14982), (97, 15099), (120, 15231), (123, 15246), (127, 15267), (130, 15297), (149, 15366), (157, 15417), (163, 15438), (173, 15492), (174, 15495),

Gene: Charles1\_18 Start: 14681, Stop: 15481, Start Num: 25

Candidate Starts for Charles1\_18:

(Start: 25 @14681 has 282 MA's), (41, 14744), (52, 14801), (53, 14810), (54, 14813), (68, 14909), (74, 14945), (97, 15062), (120, 15194), (123, 15209), (127, 15230), (130, 15260), (149, 15329), (157, 15380), (163, 15401), (173, 15455), (174, 15458),

Gene: CharlieGBrown\_17 Start: 14270, Stop: 15070, Start Num: 25

Candidate Starts for CharlieGBrown\_17:

(Start: 25 @14270 has 282 MA's), (41, 14333), (52, 14390), (53, 14399), (54, 14402), (68, 14498), (74, 14534), (97, 14651), (120, 14783), (123, 14798), (127, 14819), (130, 14849), (149, 14918), (157, 14969), (173, 15044), (174, 15047),

Gene: CharlottesWeb\_18 Start: 14586, Stop: 15398, Start Num: 25

Candidate Starts for CharlottesWeb\_18:

(Start: 25 @14586 has 282 MA's), (33, 14604), (54, 14718), (61, 14769), (74, 14850), (79, 14871), (81, 14889), (116, 15069), (126, 15126), (127, 15132), (145, 15204), (149, 15234), (163, 15306), (174, 15363),

Gene: Charming\_21 Start: 17601, Stop: 18296, Start Num: 21

Candidate Starts for Charming\_21:

(Start: 21 @17601 has 179 MA's), (30, 17610), (36, 17640), (52, 17727), (64, 17802), (83, 17916), (93, 17973), (95, 17985), (103, 18006), (131, 18159), (139, 18183), (156, 18276), (160, 18291),

Gene: CheetO\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for CheetO\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Cher\_17 Start: 14424, Stop: 15224, Start Num: 25

Candidate Starts for Cher\_17:

(Start: 25 @14424 has 282 MA's), (41, 14487), (52, 14544), (53, 14553), (54, 14556), (68, 14652), (74, 14688), (97, 14805), (120, 14937), (123, 14952), (127, 14973), (130, 15003), (149, 15072), (157, 15123), (163, 15144), (173, 15198), (174, 15201),

Gene: Chickadee\_23 Start: 17163, Stop: 17858, Start Num: 20

Candidate Starts for Chickadee\_23:

(Start: 20 @17163 has 16 MA's), (30, 17172), (36, 17202), (48, 17262), (50, 17277), (52, 17289), (74, 17433), (93, 17532), (95, 17544), (117, 17628), (130, 17715), (151, 17799),

Gene: Childish\_17 Start: 14412, Stop: 15212, Start Num: 25

Candidate Starts for Childish\_17:

(Start: 25 @14412 has 282 MA's), (41, 14475), (52, 14532), (53, 14541), (54, 14544), (68, 14640), (74, 14676), (97, 14793), (120, 14925), (123, 14940), (127, 14961), (130, 14991), (149, 15060), (157, 15111), (163, 15132), (173, 15186), (174, 15189),

Gene: Chorkpop\_18 Start: 14424, Stop: 15224, Start Num: 25

Candidate Starts for Chorkpop\_18:

(Start: 25 @14424 has 282 MA's), (41, 14487), (52, 14544), (53, 14553), (54, 14556), (68, 14652), (74, 14688), (97, 14805), (120, 14937), (123, 14952), (127, 14973), (130, 15003), (149, 15072), (157, 15123), (163, 15144), (173, 15198), (174, 15201),

Gene: ChrisnMich\_17 Start: 15373, Stop: 16179, Start Num: 24

Candidate Starts for ChrisnMich\_17:

(Start: 24 @15373 has 21 MA's), (41, 15436), (53, 15502), (54, 15505), (57, 15523), (71, 15616), (74, 15637), (79, 15658), (104, 15793), (120, 15886), (130, 15952), (143, 15985), (144, 15988), (149, 16021), (157, 16072), (163, 16093), (174, 16150),

Gene: Chunky\_18 Start: 14711, Stop: 15511, Start Num: 25

Candidate Starts for Chunky\_18:

(Start: 25 @14711 has 282 MA's), (41, 14774), (52, 14831), (53, 14840), (54, 14843), (68, 14939), (74, 14975), (97, 15092), (120, 15224), (123, 15239), (127, 15260), (130, 15290), (149, 15359), (157, 15410), (163, 15431), (173, 15485), (174, 15488),

Gene: Chute\_17 Start: 14714, Stop: 15514, Start Num: 25

Candidate Starts for Chute\_17:

(Start: 25 @14714 has 282 MA's), (41, 14777), (52, 14834), (53, 14843), (54, 14846), (68, 14942), (74, 14978), (97, 15095), (120, 15227), (123, 15242), (127, 15263), (130, 15293), (149, 15362), (157, 15413), (163, 15434), (173, 15488), (174, 15491),

Gene: Cinna\_25 Start: 16663, Stop: 17355, Start Num: 21

Candidate Starts for Cinna\_25:

(15, 16651), (Start: 21 @16663 has 179 MA's), (37, 16708), (50, 16774), (54, 16798), (61, 16849), (64, 16861), (71, 16909), (77, 16945), (82, 16972), (108, 17086), (115, 17113), (130, 17215), (131, 17218), (156, 17329),

Gene: ClamChowder\_24 Start: 15824, Stop: 16510, Start Num: 21

Candidate Starts for ClamChowder\_24:

(Start: 21 @15824 has 179 MA's), (48, 15923), (74, 16094), (75, 16097), (98, 16217), (148, 16445), (149, 16448),

Gene: Clawz\_49 Start: 26964, Stop: 27716, Start Num: 29

Candidate Starts for Clawz\_49:

(Start: 29 @26964 has 3 MA's), (31, 26970), (51, 27075), (54, 27093), (61, 27144), (71, 27204), (74, 27225), (78, 27243), (87, 27294), (88, 27300), (90, 27312), (92, 27318), (106, 27399), (114, 27432), (126, 27501), (130, 27537),

Gene: ClearAsMud\_32 Start: 18024, Stop: 18704, Start Num: 21

Candidate Starts for ClearAsMud\_32:

(Start: 21 @18024 has 179 MA's), (45, 18111), (50, 18135), (61, 18210), (64, 18222), (71, 18270), (82, 18330), (115, 18471), (123, 18519), (130, 18573), (149, 18633),

Gene: CloverMinnie\_20 Start: 16028, Stop: 16837, Start Num: 25

Candidate Starts for CloverMinnie\_20:

(Start: 25 @16028 has 282 MA's), (33, 16046), (48, 16121), (54, 16160), (60, 16205), (74, 16292), (79, 16313), (81, 16331), (83, 16337), (90, 16379), (127, 16574), (149, 16676), (163, 16748), (174, 16805),

Gene: Clown\_26 Start: 17806, Stop: 18492, Start Num: 21

Candidate Starts for Clown\_26:

(Start: 21 @17806 has 179 MA's), (48, 17905), (52, 17932), (71, 18055), (139, 18382), (149, 18430), (153, 18445),

Gene: Cobra\_18 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for Cobra\_18:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),

Gene: Colbert\_18 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for Colbert\_18:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),

Gene: ColdSoup\_50 Start: 27058, Stop: 27801, Start Num: 29

Candidate Starts for ColdSoup\_50:

(Start: 29 @27058 has 3 MA's), (31, 27064), (48, 27148), (54, 27187), (61, 27238), (74, 27319), (78, 27337), (87, 27388), (88, 27394), (90, 27406), (106, 27493), (114, 27526), (120, 27565), (126, 27595), (149, 27703),

Gene: Coldpizza\_20 Start: 16760, Stop: 17572, Start Num: 25

Candidate Starts for Coldpizza\_20:

(4, 16655), (10, 16703), (Start: 25 @16760 has 282 MA's), (50, 16868), (54, 16892), (71, 17003), (74, 17024), (116, 17243), (127, 17306), (149, 17408), (174, 17537), (179, 17561),

Gene: Coletti\_17 Start: 14714, Stop: 15514, Start Num: 25

Candidate Starts for Coletti\_17:

(Start: 25 @14714 has 282 MA's), (41, 14777), (52, 14834), (53, 14843), (54, 14846), (68, 14942), (74, 14978), (97, 15095), (120, 15227), (123, 15242), (127, 15263), (130, 15293), (149, 15362), (157, 15413), (163, 15434), (173, 15488), (174, 15491),

Gene: Cooper\_18 Start: 15481, Stop: 16287, Start Num: 24

Candidate Starts for Cooper\_18:

(Start: 24 @15481 has 21 MA's), (41, 15544), (53, 15610), (54, 15613), (57, 15631), (71, 15724), (74, 15745), (79, 15766), (104, 15901), (120, 15994), (144, 16096), (149, 16129), (152, 16141), (153, 16144), (157, 16180),

Gene: Cornobble\_17 Start: 14259, Stop: 15059, Start Num: 25

Candidate Starts for Cornobble\_17:

(Start: 25 @14259 has 282 MA's), (41, 14322), (52, 14379), (53, 14388), (54, 14391), (68, 14487), (74, 14523), (97, 14640), (120, 14772), (123, 14787), (127, 14808), (130, 14838), (149, 14907), (157, 14958), (163, 14979), (173, 15033), (174, 15036),

Gene: Cosmolli16\_17 Start: 14416, Stop: 15216, Start Num: 25

Candidate Starts for Cosmolli16\_17:

(Start: 25 @14416 has 282 MA's), (41, 14479), (52, 14536), (53, 14545), (54, 14548), (68, 14644), (74, 14680), (97, 14797), (120, 14929), (123, 14944), (127, 14965), (130, 14995), (149, 15064), (157, 15115), (163, 15136), (173, 15190), (174, 15193),

Gene: CoveyB\_25 Start: 15670, Stop: 16356, Start Num: 21

Candidate Starts for CoveyB\_25:

(Start: 21 @15670 has 179 MA's), (48, 15769), (74, 15940), (75, 15943), (98, 16063), (148, 16291), (149, 16294),

Gene: Craff\_18 Start: 14705, Stop: 15505, Start Num: 25

Candidate Starts for Craff\_18:

(Start: 25 @14705 has 282 MA's), (41, 14768), (52, 14825), (53, 14834), (54, 14837), (68, 14933), (74, 14969), (97, 15086), (120, 15218), (123, 15233), (127, 15254), (130, 15284), (149, 15353), (157, 15404), (163, 15425), (173, 15479), (174, 15482),

Gene: Cranjjs\_31 Start: 17470, Stop: 18150, Start Num: 21

Candidate Starts for Cranjjs\_31:

(Start: 21 @17470 has 179 MA's), (45, 17557), (50, 17581), (61, 17656), (64, 17668), (71, 17716), (82, 17776), (111, 17905), (115, 17917), (123, 17965), (130, 18019), (149, 18079), (162, 18139),

Gene: CrazyRich\_29 Start: 17280, Stop: 17960, Start Num: 21

Candidate Starts for CrazyRich\_29:

(Start: 21 @17280 has 179 MA's), (45, 17367), (50, 17391), (61, 17466), (64, 17478), (71, 17526), (82, 17586), (111, 17715), (115, 17727), (123, 17775), (130, 17829), (149, 17889),

Gene: Cressida\_27 Start: 16707, Stop: 17411, Start Num: 21

Candidate Starts for Cressida\_27:

(15, 16695), (Start: 21 @16707 has 179 MA's), (42, 16779), (50, 16818), (61, 16893), (64, 16905), (71, 16953), (82, 17016), (85, 17031), (108, 17130), (115, 17157), (131, 17262), (146, 17304),

Gene: Crisis\_31 Start: 17265, Stop: 17945, Start Num: 21

Candidate Starts for Crisis\_31:

(Start: 21 @17265 has 179 MA's), (45, 17352), (50, 17376), (61, 17451), (64, 17463), (71, 17511), (82, 17571), (111, 17700), (115, 17712), (123, 17760), (130, 17814), (149, 17874),

Gene: Crownjwl\_18 Start: 14472, Stop: 15272, Start Num: 25

Candidate Starts for Crownjwl\_18:

(Start: 25 @14472 has 282 MA's), (41, 14535), (52, 14592), (53, 14601), (54, 14604), (68, 14700), (74, 14736), (97, 14853), (120, 14985), (123, 15000), (127, 15021), (130, 15051), (149, 15120), (157, 15171), (163, 15192), (173, 15246), (174, 15249),

Gene: DaddyDaniels\_18 Start: 14408, Stop: 15208, Start Num: 25

Candidate Starts for DaddyDaniels\_18:

(Start: 25 @14408 has 282 MA's), (41, 14471), (52, 14528), (53, 14537), (54, 14540), (68, 14636), (74, 14672), (97, 14789), (120, 14921), (123, 14936), (127, 14957), (130, 14987), (149, 15056), (157, 15107), (163, 15128), (173, 15182), (174, 15185),

Gene: Daffy\_18 Start: 14424, Stop: 15224, Start Num: 25

Candidate Starts for Daffy\_18:

(Start: 25 @14424 has 282 MA's), (41, 14487), (52, 14544), (53, 14553), (54, 14556), (68, 14652), (74, 14688), (97, 14805), (120, 14937), (123, 14952), (127, 14973), (130, 15003), (149, 15072), (157, 15123), (163, 15144), (173, 15198), (174, 15201),

Gene: Daka\_18 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for Daka\_18:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),

Gene: Danyall\_24 Start: 15670, Stop: 16356, Start Num: 21

Candidate Starts for Danyall\_24:

(Start: 21 @15670 has 179 MA's), (48, 15769), (74, 15940), (75, 15943), (98, 16063), (148, 16291), (149, 16294),

Gene: Dati\_18 Start: 14412, Stop: 15212, Start Num: 25

Candidate Starts for Dati\_18:

(Start: 25 @14412 has 282 MA's), (41, 14475), (52, 14532), (53, 14541), (54, 14544), (68, 14640), (74, 14676), (97, 14793), (120, 14925), (123, 14940), (127, 14961), (130, 14991), (149, 15060), (157,



15111), (163, 15132), (173, 15186), (174, 15189),

Gene: DelRivs\_17 Start: 14411, Stop: 15211, Start Num: 25

Candidate Starts for DelRivs\_17:

(Start: 25 @14411 has 282 MA's), (41, 14474), (52, 14531), (53, 14540), (54, 14543), (68, 14639), (74, 14675), (97, 14792), (120, 14924), (123, 14939), (127, 14960), (130, 14990), (149, 15059), (157, 15110), (163, 15131), (173, 15185), (174, 15188),

Gene: Delrey21\_24 Start: 18380, Stop: 19072, Start Num: 20

Candidate Starts for Delrey21\_24:

(Start: 20 @18380 has 16 MA's), (36, 18419), (39, 18434), (43, 18455), (44, 18458), (50, 18494), (93, 18749), (151, 19016),

Gene: Derg\_21 Start: 17869, Stop: 18564, Start Num: 21

Candidate Starts for Derg\_21:

(Start: 21 @17869 has 179 MA's), (36, 17908), (64, 18070), (93, 18241), (95, 18253), (131, 18427), (156, 18544), (160, 18559),

Gene: Derpp\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Derpp\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Dexdert\_24 Start: 17606, Stop: 18295, Start Num: 20

Candidate Starts for Dexdert\_24:

(Start: 20 @17606 has 16 MA's), (30, 17615), (33, 17630), (36, 17645), (48, 17705), (50, 17720), (52, 17732), (93, 17975), (95, 17987), (117, 18071), (123, 18104), (130, 18158), (139, 18185), (143, 18197), (151, 18242),

Gene: Dice\_17 Start: 14399, Stop: 15199, Start Num: 25

Candidate Starts for Dice\_17:

(Start: 25 @14399 has 282 MA's), (41, 14462), (52, 14519), (53, 14528), (54, 14531), (68, 14627), (74, 14663), (97, 14780), (120, 14912), (123, 14927), (127, 14948), (130, 14978), (149, 15047), (157, 15098), (163, 15119), (173, 15173), (174, 15176),

Gene: DigitDog\_21 Start: 16468, Stop: 17304, Start Num: 13

Candidate Starts for DigitDog\_21:

(5, 16399), (Start: 13 @16468 has 9 MA's), (Start: 27 @16501 has 11 MA's), (50, 16609), (51, 16615), (53, 16630), (54, 16633), (57, 16651), (74, 16765), (127, 17050), (130, 17080), (141, 17107), (149, 17149),

Gene: Dingo\_18 Start: 14684, Stop: 15484, Start Num: 25

Candidate Starts for Dingo\_18:

(Start: 25 @14684 has 282 MA's), (41, 14747), (52, 14804), (53, 14813), (54, 14816), (68, 14912), (74, 14948), (97, 15065), (120, 15197), (123, 15212), (127, 15233), (130, 15263), (149, 15332), (157, 15383), (163, 15404), (173, 15458), (174, 15461),

Gene: Dione\_17 Start: 14400, Stop: 15200, Start Num: 25

Candidate Starts for Dione\_17:

(Start: 25 @14400 has 282 MA's), (41, 14463), (52, 14520), (53, 14529), (54, 14532), (68, 14628), (74, 14664), (97, 14781), (120, 14913), (123, 14928), (127, 14949), (130, 14979), (149, 15048), (157, 15099), (163, 15120), (173, 15174), (174, 15177),

Gene: DirtJuice\_18 Start: 14687, Stop: 15487, Start Num: 25

Candidate Starts for DirtJuice\_18:

(Start: 25 @14687 has 282 MA's), (41, 14750), (52, 14807), (53, 14816), (54, 14819), (68, 14915), (74, 14951), (97, 15068), (120, 15200), (123, 15215), (127, 15236), (130, 15266), (149, 15335), (157, 15386), (163, 15407), (173, 15461), (174, 15464),

Gene: DoctorFroggo\_24 Start: 18380, Stop: 19072, Start Num: 20

Candidate Starts for DoctorFroggo\_24:

(Start: 20 @18380 has 16 MA's), (36, 18419), (39, 18434), (43, 18455), (44, 18458), (50, 18494), (93, 18749), (151, 19016),

Gene: Doddsville\_18 Start: 14412, Stop: 15212, Start Num: 25

Candidate Starts for Doddsville\_18:

(Start: 25 @14412 has 282 MA's), (41, 14475), (52, 14532), (53, 14541), (54, 14544), (68, 14640), (74, 14676), (97, 14793), (120, 14925), (123, 14940), (127, 14961), (130, 14991), (149, 15060), (157, 15111), (163, 15132), (173, 15186), (174, 15189),

Gene: DoesntMatter\_18 Start: 14681, Stop: 15481, Start Num: 25

Candidate Starts for DoesntMatter\_18:

(Start: 25 @14681 has 282 MA's), (41, 14744), (52, 14801), (53, 14810), (54, 14813), (68, 14909), (74, 14945), (97, 15062), (120, 15194), (123, 15209), (127, 15230), (130, 15260), (149, 15329), (157, 15380), (163, 15401), (173, 15455), (174, 15458),

Gene: DonSanchon\_17 Start: 14400, Stop: 15200, Start Num: 25

Candidate Starts for DonSanchon\_17:

(Start: 25 @14400 has 282 MA's), (41, 14463), (52, 14520), (53, 14529), (54, 14532), (68, 14628), (74, 14664), (97, 14781), (120, 14913), (123, 14928), (127, 14949), (130, 14979), (149, 15048), (157, 15099), (163, 15120), (173, 15174), (174, 15177),

Gene: DonTron\_49 Start: 27098, Stop: 27841, Start Num: 29

Candidate Starts for DonTron\_49:

(Start: 29 @27098 has 3 MA's), (31, 27104), (48, 27188), (54, 27227), (61, 27278), (74, 27359), (78, 27377), (87, 27428), (88, 27434), (90, 27446), (106, 27533), (114, 27566), (126, 27635), (149, 27743),

Gene: DonaldDuck\_28 Start: 17046, Stop: 17993, Start Num: 21

Candidate Starts for DonaldDuck\_28:

(Start: 21 @17046 has 179 MA's), (33, 17070), (42, 17118), (51, 17166), (131, 17616), (157, 17733), (180, 17838), (187, 17913),

Gene: Donny\_20 Start: 16509, Stop: 17345, Start Num: 13

Candidate Starts for Donny\_20:

(2, 16398), (Start: 13 @16509 has 9 MA's), (Start: 27 @16542 has 11 MA's), (48, 16635), (50, 16650), (51, 16656), (53, 16671), (54, 16674), (57, 16692), (74, 16806), (127, 17091), (130, 17121), (145, 17160), (149, 17190), (163, 17262),

Gene: DuchessDung\_17 Start: 14252, Stop: 15052, Start Num: 25

Candidate Starts for DuchessDung\_17:

(Start: 25 @14252 has 282 MA's), (41, 14315), (52, 14372), (53, 14381), (54, 14384), (68, 14480), (74, 14516), (97, 14633), (120, 14765), (123, 14780), (127, 14801), (130, 14831), (149, 14900), (157, 14951), (163, 14972), (173, 15026), (174, 15029),

Gene: Duggie\_17 Start: 14414, Stop: 15214, Start Num: 25

Candidate Starts for Duggie\_17:

(Start: 25 @14414 has 282 MA's), (41, 14477), (52, 14534), (53, 14543), (54, 14546), (68, 14642), (74, 14678), (97, 14795), (120, 14927), (123, 14942), (127, 14963), (130, 14993), (149, 15062), (157, 15113), (163, 15134), (173, 15188), (174, 15191),

Gene: DunneganBoMo\_77 Start: 46623, Stop: 47267, Start Num: 21

Candidate Starts for DunneganBoMo\_77:

(Start: 21 @46623 has 179 MA's), (43, 46698), (50, 46737), (74, 46893), (113, 47073), (139, 47196),

Gene: Durga\_18 Start: 14713, Stop: 15513, Start Num: 25

Candidate Starts for Durga\_18:

(Start: 25 @14713 has 282 MA's), (41, 14776), (52, 14833), (53, 14842), (54, 14845), (68, 14941), (74, 14977), (97, 15094), (120, 15226), (123, 15241), (127, 15262), (130, 15292), (149, 15361), (157, 15412), (163, 15433), (173, 15487), (174, 15490),

Gene: EMoore\_19 Start: 16450, Stop: 17142, Start Num: 21

Candidate Starts for EMoore\_19:

(Start: 21 @16450 has 179 MA's), (36, 16489), (52, 16576), (74, 16720), (83, 16765), (93, 16819), (103, 16852), (129, 16987), (132, 17008), (151, 17086), (153, 17092),

Gene: EarickHC\_30 Start: 17191, Stop: 17871, Start Num: 21

Candidate Starts for EarickHC\_30:

(Start: 21 @17191 has 179 MA's), (45, 17278), (50, 17302), (61, 17377), (64, 17389), (71, 17437), (82, 17497), (111, 17626), (115, 17638), (123, 17686), (130, 17740), (149, 17800),

Gene: EastView9101\_20 Start: 16515, Stop: 17351, Start Num: 13

Candidate Starts for EastView9101\_20:

(3, 16431), (Start: 13 @16515 has 9 MA's), (Start: 27 @16548 has 11 MA's), (50, 16656), (51, 16662), (53, 16677), (54, 16680), (57, 16698), (74, 16812), (127, 17097), (130, 17127), (145, 17166), (149, 17196), (163, 17268), (178, 17346),

Gene: EdmundFerry\_22 Start: 17192, Stop: 17887, Start Num: 20

Candidate Starts for EdmundFerry\_22:

(Start: 20 @17192 has 16 MA's), (30, 17201), (36, 17231), (48, 17291), (50, 17306), (52, 17318), (74, 17462), (93, 17561), (95, 17573), (117, 17657), (130, 17744), (151, 17828),

Gene: Emiris\_18 Start: 14694, Stop: 15494, Start Num: 25

Candidate Starts for Emiris\_18:

(Start: 25 @14694 has 282 MA's), (41, 14757), (52, 14814), (53, 14823), (54, 14826), (68, 14922), (74, 14958), (97, 15075), (120, 15207), (123, 15222), (127, 15243), (130, 15273), (149, 15342), (157, 15393), (163, 15414), (173, 15468), (174, 15471),

Gene: EmpTee\_18 Start: 14700, Stop: 15500, Start Num: 25

Candidate Starts for EmpTee\_18:

(Start: 25 @14700 has 282 MA's), (41, 14763), (53, 14829), (54, 14832), (68, 14928), (74, 14964), (97, 15081), (120, 15213), (123, 15228), (127, 15249), (130, 15279), (149, 15348), (157, 15399), (163, 15420), (173, 15474), (174, 15477),

Gene: Epah\_17 Start: 15373, Stop: 16179, Start Num: 24

Candidate Starts for Epah\_17:

(Start: 24 @15373 has 21 MA's), (41, 15436), (53, 15502), (54, 15505), (57, 15523), (71, 15616), (74, 15637), (79, 15658), (104, 15793), (120, 15886), (130, 15952), (143, 15985), (144, 15988), (149, 16021), (157, 16072), (163, 16093), (174, 16150),

Gene: Eremos\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Eremos\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Etaye\_18 Start: 14684, Stop: 15484, Start Num: 25

Candidate Starts for Etaye\_18:

(Start: 25 @14684 has 282 MA's), (41, 14747), (52, 14804), (53, 14813), (54, 14816), (68, 14912), (74, 14948), (97, 15065), (120, 15197), (123, 15212), (127, 15233), (130, 15263), (149, 15332), (157, 15383), (163, 15404), (173, 15458), (174, 15461),

Gene: Eugenia\_18 Start: 14712, Stop: 15512, Start Num: 25

Candidate Starts for Eugenia\_18:

(Start: 25 @14712 has 282 MA's), (41, 14775), (52, 14832), (53, 14841), (54, 14844), (68, 14940), (74, 14976), (97, 15093), (120, 15225), (123, 15240), (127, 15261), (130, 15291), (149, 15360), (157, 15411), (163, 15432), (173, 15486), (174, 15489),

Gene: Evaa\_19 Start: 15945, Stop: 16754, Start Num: 23

Candidate Starts for Evaa\_19:

(17, 15936), (Start: 23 @15945 has 1 MA's), (33, 15963), (48, 16038), (54, 16077), (61, 16128), (71, 16188), (74, 16209), (79, 16230), (116, 16428), (127, 16491), (149, 16593),

Gene: Evamon\_22 Start: 15156, Stop: 15842, Start Num: 21

Candidate Starts for Evamon\_22:

(Start: 21 @15156 has 179 MA's), (48, 15255), (74, 15426), (75, 15429), (98, 15549), (148, 15777), (149, 15780),

Gene: EverythinBagel\_28 Start: 17458, Stop: 18381, Start Num: 33

Candidate Starts for EverythinBagel\_28:

(Start: 21 @17434 has 179 MA's), (33, 17458), (42, 17506), (51, 17554), (131, 18004), (157, 18121), (180, 18226), (187, 18301),

Gene: Fanaw\_18 Start: 16467, Stop: 17273, Start Num: 24

Candidate Starts for Fanaw\_18:

(Start: 24 @16467 has 21 MA's), (41, 16530), (53, 16596), (54, 16599), (57, 16617), (71, 16710), (74, 16731), (79, 16752), (93, 16830), (104, 16887), (120, 16980), (127, 17016), (144, 17082), (149, 17115), (152, 17127), (153, 17130), (157, 17166),

Gene: Fang\_18 Start: 14715, Stop: 15515, Start Num: 25

Candidate Starts for Fang\_18:

(Start: 25 @14715 has 282 MA's), (41, 14778), (52, 14835), (53, 14844), (54, 14847), (68, 14943), (74, 14979), (97, 15096), (120, 15228), (123, 15243), (127, 15264), (130, 15294), (149, 15363), (157, 15414), (163, 15435), (173, 15489), (174, 15492),

Gene: Fireball\_23 Start: 15288, Stop: 15974, Start Num: 21

Candidate Starts for Fireball\_23:

(Start: 21 @15288 has 179 MA's), (52, 15414), (75, 15561), (98, 15681), (130, 15837), (139, 15864), (148, 15909), (149, 15912),

Gene: Fireman\_30 Start: 17082, Stop: 17762, Start Num: 21

Candidate Starts for Fireman\_30:

(Start: 21 @17082 has 179 MA's), (45, 17169), (60, 17262), (64, 17280), (71, 17328), (75, 17352), (82, 17388), (108, 17502), (115, 17529), (123, 17577), (130, 17631), (149, 17691), (162, 17751),

Gene: Fitzgerald\_21 Start: 18039, Stop: 18734, Start Num: 21

Candidate Starts for Fitzgerald\_21:

(Start: 21 @18039 has 179 MA's), (30, 18048), (36, 18078), (52, 18165), (64, 18240), (71, 18288), (93, 18411), (95, 18423), (103, 18444), (131, 18597), (156, 18714),

Gene: Fizzles\_28 Start: 16958, Stop: 17899, Start Num: 22

Candidate Starts for Fizzles\_28:

(Start: 21 @16955 has 179 MA's), (Start: 22 @16958 has 12 MA's), (33, 16979), (42, 17027), (48, 17054), (71, 17204), (93, 17327), (157, 17642), (167, 17681), (180, 17744), (183, 17780), (188, 17837),

Gene: Flatwoods\_24 Start: 18230, Stop: 18925, Start Num: 21

Candidate Starts for Flatwoods\_24:

(Start: 21 @18230 has 179 MA's), (36, 18269), (64, 18431), (66, 18458), (93, 18602), (95, 18614), (131, 18788), (156, 18905), (160, 18920),

Gene: FluffyNinja\_18 Start: 14703, Stop: 15503, Start Num: 25

Candidate Starts for FluffyNinja\_18:

(Start: 25 @14703 has 282 MA's), (41, 14766), (52, 14823), (53, 14832), (54, 14835), (68, 14931), (74, 14967), (97, 15084), (120, 15216), (123, 15231), (127, 15252), (130, 15282), (149, 15351), (157, 15402), (163, 15423), (173, 15477), (174, 15480),

Gene: Fortunato\_18 Start: 16431, Stop: 17237, Start Num: 24

Candidate Starts for Fortunato\_18:

(Start: 24 @16431 has 21 MA's), (41, 16494), (53, 16560), (54, 16563), (57, 16581), (71, 16674), (74, 16695), (79, 16716), (93, 16794), (104, 16851), (120, 16944), (144, 17046), (149, 17079), (152, 17091), (153, 17094), (157, 17130),

Gene: Forza\_89 Start: 44347, Stop: 44991, Start Num: 21

Candidate Starts for Forza\_89:

(Start: 21 @44347 has 179 MA's), (37, 44389), (50, 44458), (113, 44794), (119, 44818), (120, 44830), (121, 44833), (128, 44872),

Gene: Fosterous\_21 Start: 18489, Stop: 19184, Start Num: 21

Candidate Starts for Fosterous\_21:

(Start: 21 @18489 has 179 MA's), (30, 18498), (36, 18528), (52, 18615), (64, 18690), (83, 18804), (93, 18861), (95, 18873), (103, 18894), (131, 19047), (156, 19164), (160, 19179),

Gene: Fozzie\_17 Start: 14709, Stop: 15509, Start Num: 25

Candidate Starts for Fozzie\_17:

(Start: 25 @14709 has 282 MA's), (41, 14772), (52, 14829), (53, 14838), (54, 14841), (68, 14937), (74, 14973), (97, 15090), (120, 15222), (123, 15237), (127, 15258), (130, 15288), (149, 15357), (157, 15408), (163, 15429), (173, 15483), (174, 15486),

Gene: FrankDeliGuy\_26 Start: 17032, Stop: 17955, Start Num: 33

Candidate Starts for FrankDeliGuy\_26:

(Start: 21 @17008 has 179 MA's), (33, 17032), (42, 17080), (51, 17128), (130, 17575), (131, 17578), (157, 17695), (180, 17800), (187, 17875),

Gene: Frankicide\_18 Start: 14701, Stop: 15501, Start Num: 25

Candidate Starts for Frankicide\_18:

(Start: 25 @14701 has 282 MA's), (41, 14764), (52, 14821), (53, 14830), (54, 14833), (68, 14929), (74, 14965), (97, 15082), (120, 15214), (123, 15229), (127, 15250), (130, 15280), (149, 15349), (157, 15400), (163, 15421), (173, 15475), (174, 15478),

Gene: Fransoyer\_30 Start: 17064, Stop: 18002, Start Num: 21

Candidate Starts for Fransoyer\_30:

(Start: 21 @17064 has 179 MA's), (33, 17088), (67, 17295), (71, 17313), (119, 17550), (129, 17616), (130, 17631), (149, 17700), (151, 17709), (153, 17715), (180, 17853),

Gene: Frederick\_18 Start: 16440, Stop: 17246, Start Num: 24

Candidate Starts for Frederick\_18:

(Start: 24 @16440 has 21 MA's), (41, 16503), (53, 16569), (54, 16572), (57, 16590), (71, 16683), (74, 16704), (79, 16725), (93, 16803), (104, 16860), (120, 16953), (144, 17055), (149, 17088), (152, 17100), (153, 17103), (157, 17139),

Gene: Fregley\_28 Start: 16254, Stop: 17195, Start Num: 21

Candidate Starts for Fregley\_28:

(Start: 21 @16254 has 179 MA's), (37, 16299), (87, 16593), (123, 16764), (130, 16818), (131, 16821), (153, 16899), (166, 16968), (168, 16989), (188, 17133),

Gene: Fresco\_18 Start: 14690, Stop: 15502, Start Num: 26

Candidate Starts for Fresco\_18:

(Start: 26 @14690 has 5 MA's), (33, 14708), (48, 14783), (52, 14810), (54, 14822), (60, 14867), (74, 14954), (79, 14975), (120, 15200), (126, 15230), (127, 15236), (149, 15338), (163, 15410), (174, 15467),

Gene: Freya\_17 Start: 14395, Stop: 15195, Start Num: 25

Candidate Starts for Freya\_17:

(Start: 25 @14395 has 282 MA's), (41, 14458), (52, 14515), (53, 14524), (54, 14527), (68, 14623), (74, 14659), (97, 14776), (120, 14908), (123, 14923), (127, 14944), (130, 14974), (149, 15043), (157, 15094), (163, 15115), (173, 15169), (174, 15172),

Gene: FriarPreacher\_18 Start: 14720, Stop: 15520, Start Num: 25

Candidate Starts for FriarPreacher\_18:

(Start: 25 @14720 has 282 MA's), (41, 14783), (52, 14840), (53, 14849), (54, 14852), (68, 14948), (74, 14984), (97, 15101), (120, 15233), (123, 15248), (127, 15269), (130, 15299), (149, 15368), (157, 15419), (163, 15440), (173, 15494), (174, 15497),

Gene: Fringe\_18 Start: 14682, Stop: 15482, Start Num: 25

Candidate Starts for Fringe\_18:

(Start: 25 @14682 has 282 MA's), (41, 14745), (52, 14802), (53, 14811), (54, 14814), (68, 14910), (74, 14946), (97, 15063), (120, 15195), (123, 15210), (127, 15231), (130, 15261), (149, 15330), (157, 15381), (163, 15402), (173, 15456), (174, 15459),

Gene: FugateOSU\_17 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for FugateOSU\_17:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Fugax\_24 Start: 15824, Stop: 16510, Start Num: 21

Candidate Starts for Fugax\_24:

(Start: 21 @15824 has 179 MA's), (48, 15923), (74, 16094), (75, 16097), (98, 16217), (148, 16445), (149, 16448),

Gene: Funsized\_22 Start: 18420, Stop: 19223, Start Num: 27

Candidate Starts for Funsized\_22:

(Start: 27 @18420 has 11 MA's), (41, 18486), (48, 18516), (50, 18531), (52, 18543), (53, 18552), (54, 18555), (71, 18666), (74, 18687), (92, 18780), (115, 18906), (120, 18936), (130, 19002), (146, 19047), (149, 19071), (157, 19116), (163, 19137), (166, 19149),

Gene: FuzzBuster\_34 Start: 17131, Stop: 18030, Start Num: 21

Candidate Starts for FuzzBuster\_34:

(Start: 21 @17131 has 179 MA's), (33, 17155), (47, 17227), (82, 17443), (108, 17563), (115, 17590), (130, 17692), (142, 17722), (150, 17764), (174, 17890), (177, 17911),

Gene: GMA2\_18 Start: 17722, Stop: 18366, Start Num: 21

Candidate Starts for GMA2\_18:

(Start: 21 @17722 has 179 MA's), (34, 17752), (50, 17833), (113, 18169), (120, 18205), (121, 18208),

Gene: GTE6\_23 Start: 17681, Stop: 18376, Start Num: 20

Candidate Starts for GTE6\_23:

(Start: 20 @17681 has 16 MA's), (30, 17690), (36, 17720), (48, 17780), (50, 17795), (52, 17807), (74, 17951), (93, 18050), (95, 18062), (117, 18146), (130, 18233), (151, 18317),

Gene: Gaea\_23 Start: 17881, Stop: 18576, Start Num: 20

Candidate Starts for Gaea\_23:

(Start: 20 @17881 has 16 MA's), (36, 17920), (49, 17992), (64, 18082), (66, 18109), (93, 18253), (95, 18265), (131, 18439), (156, 18556), (160, 18571),

Gene: Galadriel\_25 Start: 18354, Stop: 19049, Start Num: 21

Candidate Starts for Galadriel\_25:

(Start: 21 @18354 has 179 MA's), (30, 18363), (36, 18393), (52, 18480), (64, 18555), (83, 18669), (93, 18726), (95, 18738), (103, 18759), (131, 18912), (156, 19029), (160, 19044),

Gene: Ganandorf\_29 Start: 17327, Stop: 18007, Start Num: 21

Candidate Starts for Ganandorf\_29:

(Start: 21 @17327 has 179 MA's), (45, 17414), (50, 17438), (61, 17513), (64, 17525), (71, 17573), (82, 17633), (111, 17762), (115, 17774), (123, 17822), (130, 17876), (149, 17936),

Gene: Gareth\_17 Start: 14403, Stop: 15203, Start Num: 25

Candidate Starts for Gareth\_17:

(Start: 25 @14403 has 282 MA's), (41, 14466), (52, 14523), (53, 14532), (54, 14535), (68, 14631), (74, 14667), (97, 14784), (120, 14916), (123, 14931), (127, 14952), (130, 14982), (149, 15051), (157, 15102), (163, 15123), (173, 15177), (174, 15180),

Gene: Gazebo\_27 Start: 17486, Stop: 18433, Start Num: 21

Candidate Starts for Gazebo\_27:

(Start: 21 @17486 has 179 MA's), (33, 17510), (42, 17558), (51, 17606), (130, 18053), (131, 18056), (157, 18173), (180, 18278),

Gene: GeneCoco\_18 Start: 14705, Stop: 15505, Start Num: 25

Candidate Starts for GeneCoco\_18:

(Start: 25 @14705 has 282 MA's), (41, 14768), (52, 14825), (53, 14834), (54, 14837), (68, 14933), (74, 14969), (97, 15086), (120, 15218), (123, 15233), (127, 15254), (130, 15284), (149, 15353), (157,

15404), (173, 15479), (174, 15482),

Gene: Geodirt\_22 Start: 18601, Stop: 19296, Start Num: 21

Candidate Starts for Geodirt\_22:

(Start: 21 @18601 has 179 MA's), (30, 18610), (36, 18640), (52, 18727), (64, 18802), (83, 18916), (93, 18973), (95, 18985), (103, 19006), (131, 19159), (156, 19276), (160, 19291),

Gene: Gezellig\_23 Start: 15288, Stop: 15974, Start Num: 21

Candidate Starts for Gezellig\_23:

(Start: 21 @15288 has 179 MA's), (52, 15414), (75, 15561), (98, 15681), (130, 15837), (139, 15864), (148, 15909), (149, 15912),

Gene: GinPorsche\_17 Start: 15373, Stop: 16179, Start Num: 24

Candidate Starts for GinPorsche\_17:

(Start: 24 @15373 has 21 MA's), (41, 15436), (53, 15502), (54, 15505), (57, 15523), (71, 15616), (74, 15637), (79, 15658), (104, 15793), (120, 15886), (130, 15952), (143, 15985), (144, 15988), (149, 16021), (157, 16072), (163, 16093), (174, 16150),

Gene: Giraffe\_18 Start: 14407, Stop: 15207, Start Num: 25

Candidate Starts for Giraffe\_18:

(Start: 25 @14407 has 282 MA's), (41, 14470), (52, 14527), (53, 14536), (54, 14539), (68, 14635), (74, 14671), (97, 14788), (120, 14920), (123, 14935), (127, 14956), (130, 14986), (149, 15055), (157, 15106), (163, 15127), (173, 15181), (174, 15184),

Gene: GodonK\_78 Start: 39164, Stop: 39817, Start Num: 21

Candidate Starts for GodonK\_78:

(Start: 21 @39164 has 179 MA's), (50, 39278), (78, 39452), (113, 39620), (118, 39641), (120, 39656), (121, 39659),

Gene: Gophee\_18 Start: 14684, Stop: 15484, Start Num: 25

Candidate Starts for Gophee\_18:

(Start: 25 @14684 has 282 MA's), (41, 14747), (52, 14804), (53, 14813), (54, 14816), (68, 14912), (74, 14948), (97, 15065), (120, 15197), (123, 15212), (127, 15233), (130, 15263), (149, 15332), (157, 15383), (163, 15404), (173, 15458), (174, 15461),

Gene: Grand2040\_17 Start: 14422, Stop: 15222, Start Num: 25

Candidate Starts for Grand2040\_17:

(Start: 25 @14422 has 282 MA's), (41, 14485), (52, 14542), (53, 14551), (54, 14554), (68, 14650), (74, 14686), (97, 14803), (120, 14935), (123, 14950), (127, 14971), (130, 15001), (149, 15070), (157, 15121), (163, 15142), (173, 15196), (174, 15199),

Gene: Grassboy\_29 Start: 17659, Stop: 18606, Start Num: 21

Candidate Starts for Grassboy\_29:

(Start: 21 @17659 has 179 MA's), (33, 17683), (42, 17731), (51, 17779), (130, 18226), (131, 18229), (157, 18346), (180, 18451), (187, 18526),

Gene: Gustavo\_23 Start: 18018, Stop: 18713, Start Num: 21

Candidate Starts for Gustavo\_23:

(8, 17958), (Start: 21 @18018 has 179 MA's), (36, 18057), (64, 18219), (93, 18390), (95, 18402), (156, 18693), (160, 18708),

Gene: Gwilliam\_18 Start: 14696, Stop: 15496, Start Num: 25

Candidate Starts for Gwilliam\_18:



(Start: 25 @14696 has 282 MA's), (41, 14759), (52, 14816), (53, 14825), (54, 14828), (68, 14924), (74, 14960), (97, 15077), (120, 15209), (123, 15224), (127, 15245), (130, 15275), (149, 15344), (157, 15395), (163, 15416), (173, 15470), (174, 15473),

Gene: Gyarad\_0018 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Gyarad\_0018:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: HSavage\_18 Start: 14707, Stop: 15507, Start Num: 25

Candidate Starts for HSavage\_18:

(Start: 25 @14707 has 282 MA's), (41, 14770), (52, 14827), (53, 14836), (54, 14839), (68, 14935), (74, 14971), (97, 15088), (120, 15220), (123, 15235), (127, 15256), (130, 15286), (149, 15355), (157, 15406), (163, 15427), (173, 15481), (174, 15484),

Gene: Haimas\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Haimas\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Haleema\_17 Start: 14424, Stop: 15224, Start Num: 25

Candidate Starts for Haleema\_17:

(Start: 25 @14424 has 282 MA's), (41, 14487), (52, 14544), (53, 14553), (54, 14556), (68, 14652), (74, 14688), (97, 14805), (120, 14937), (123, 14952), (127, 14973), (130, 15003), (149, 15072), (157, 15123), (163, 15144), (173, 15198), (174, 15201),

Gene: Hally898\_17 Start: 15373, Stop: 16179, Start Num: 24

Candidate Starts for Hally898\_17:

(Start: 24 @15373 has 21 MA's), (41, 15436), (53, 15502), (54, 15505), (57, 15523), (71, 15616), (74, 15637), (79, 15658), (104, 15793), (120, 15886), (130, 15952), (143, 15985), (144, 15988), (149, 16021), (157, 16072), (163, 16093), (174, 16150),

Gene: Halo3\_23 Start: 15581, Stop: 16267, Start Num: 21

Candidate Starts for Halo3\_23:

(Start: 21 @15581 has 179 MA's), (48, 15680), (74, 15851), (75, 15854), (98, 15974), (148, 16202), (149, 16205),

Gene: Hamish\_18 Start: 14693, Stop: 15493, Start Num: 25

Candidate Starts for Hamish\_18:

(Start: 25 @14693 has 282 MA's), (41, 14756), (52, 14813), (53, 14822), (54, 14825), (68, 14921), (74, 14957), (97, 15074), (120, 15206), (123, 15221), (127, 15242), (130, 15272), (149, 15341), (157, 15392), (163, 15413), (173, 15467), (174, 15470),

Gene: Hangman\_18 Start: 16440, Stop: 17246, Start Num: 24

Candidate Starts for Hangman\_18:

(Start: 24 @16440 has 21 MA's), (41, 16503), (53, 16569), (54, 16572), (57, 16590), (71, 16683), (74, 16704), (79, 16725), (101, 16842), (104, 16860), (120, 16953), (130, 17019), (144, 17055), (149, 17088), (152, 17100), (153, 17103), (157, 17139),

Gene: Hans\_26 Start: 18792, Stop: 19478, Start Num: 21

Candidate Starts for Hans\_26:

(Start: 21 @18792 has 179 MA's), (36, 18831), (52, 18918), (71, 19041), (75, 19065), (83, 19107), (93, 19161), (103, 19194), (132, 19350), (151, 19428), (153, 19434),

Gene: Hartsy\_18 Start: 14696, Stop: 15496, Start Num: 25

Candidate Starts for Hartsy\_18:

(Start: 25 @14696 has 282 MA's), (41, 14759), (52, 14816), (53, 14825), (54, 14828), (68, 14924), (74, 14960), (97, 15077), (120, 15209), (123, 15224), (127, 15245), (130, 15275), (149, 15344), (157, 15395), (163, 15416), (173, 15470), (174, 15473),

Gene: Harvey\_18 Start: 14721, Stop: 15521, Start Num: 25

Candidate Starts for Harvey\_18:

(Start: 25 @14721 has 282 MA's), (41, 14784), (52, 14841), (53, 14850), (54, 14853), (68, 14949), (74, 14985), (97, 15102), (120, 15234), (123, 15249), (127, 15270), (130, 15300), (149, 15369), (157, 15420), (163, 15441), (173, 15495), (174, 15498),

Gene: Hashim76\_23 Start: 15905, Stop: 16705, Start Num: 25

Candidate Starts for Hashim76\_23:

(Start: 25 @15905 has 282 MA's), (41, 15968), (53, 16034), (54, 16037), (74, 16169), (97, 16286), (104, 16325), (141, 16511), (149, 16553), (159, 16610),

Gene: Heath\_18 Start: 16437, Stop: 17243, Start Num: 24

Candidate Starts for Heath\_18:

(Start: 24 @16437 has 21 MA's), (41, 16500), (53, 16566), (54, 16569), (57, 16587), (71, 16680), (74, 16701), (79, 16722), (104, 16857), (120, 16950), (143, 17049), (144, 17052), (149, 17085), (152, 17097), (153, 17100), (157, 17136),

Gene: Held\_18 Start: 14407, Stop: 15207, Start Num: 25

Candidate Starts for Held\_18:

(Start: 25 @14407 has 282 MA's), (41, 14470), (52, 14527), (53, 14536), (54, 14539), (68, 14635), (74, 14671), (97, 14788), (120, 14920), (123, 14935), (127, 14956), (130, 14986), (149, 15055), (157, 15106), (163, 15127), (173, 15181), (174, 15184),

Gene: Hendrix\_60 Start: 33192, Stop: 34076, Start Num: 21

Candidate Starts for Hendrix\_60:

(Start: 21 @33192 has 179 MA's), (33, 33216), (61, 33378), (71, 33438), (82, 33501), (115, 33645), (131, 33750), (140, 33771), (167, 33906),

Gene: HenryJackson\_17 Start: 14421, Stop: 15221, Start Num: 25

Candidate Starts for HenryJackson\_17:

(Start: 25 @14421 has 282 MA's), (41, 14484), (52, 14541), (53, 14550), (54, 14553), (68, 14649), (74, 14685), (97, 14802), (120, 14934), (123, 14949), (127, 14970), (130, 15000), (149, 15069), (157, 15120), (163, 15141), (173, 15195), (174, 15198),

Gene: Hermeonysus\_29 Start: 17199, Stop: 17879, Start Num: 21

Candidate Starts for Hermeonysus\_29:

(Start: 21 @17199 has 179 MA's), (45, 17286), (50, 17310), (61, 17385), (64, 17397), (71, 17445), (82, 17505), (111, 17634), (115, 17646), (123, 17694), (130, 17748), (149, 17808), (162, 17868),

Gene: Hertubise\_18 Start: 14714, Stop: 15514, Start Num: 25

Candidate Starts for Hertubise\_18:

(Start: 25 @14714 has 282 MA's), (41, 14777), (52, 14834), (53, 14843), (54, 14846), (68, 14942), (74, 14978), (97, 15095), (120, 15227), (123, 15242), (127, 15263), (130, 15293), (149, 15362), (157, 15413), (163, 15434), (173, 15488), (174, 15491),

Gene: Hetaeria\_18 Start: 14717, Stop: 15517, Start Num: 25

Candidate Starts for Hetaeria\_18:

(Start: 25 @14717 has 282 MA's), (41, 14780), (52, 14837), (53, 14846), (54, 14849), (68, 14945), (74, 14981), (97, 15098), (120, 15230), (123, 15245), (127, 15266), (130, 15296), (149, 15365), (157, 15416), (163, 15437), (173, 15491), (174, 15494),

Gene: HighStump\_17 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for HighStump\_17:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Hocus\_17 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for Hocus\_17:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Honeyfin\_31 Start: 17515, Stop: 18195, Start Num: 21

Candidate Starts for Honeyfin\_31:

(Start: 21 @17515 has 179 MA's), (45, 17602), (50, 17626), (61, 17701), (64, 17713), (71, 17761), (82, 17821), (111, 17950), (115, 17962), (123, 18010), (130, 18064), (149, 18124),

Gene: Horchata\_18 Start: 14686, Stop: 15486, Start Num: 25

Candidate Starts for Horchata\_18:

(Start: 25 @14686 has 282 MA's), (41, 14749), (52, 14806), (53, 14815), (54, 14818), (68, 14914), (74, 14950), (97, 15067), (120, 15199), (123, 15214), (127, 15235), (130, 15265), (149, 15334), (157, 15385), (163, 15406), (173, 15460), (174, 15463),

Gene: Hosp\_014 Start: 13184, Stop: 13993, Start Num: 27

Candidate Starts for Hosp\_014:

(14, 13157), (19, 13175), (Start: 27 @13184 has 11 MA's), (53, 13313), (54, 13316), (71, 13427), (73, 13442), (74, 13448), (97, 13571), (127, 13739), (130, 13769), (157, 13889), (174, 13967), (176, 13982),

Gene: Hydro\_18 Start: 16437, Stop: 17243, Start Num: 24

Candidate Starts for Hydro\_18:

(Start: 24 @16437 has 21 MA's), (41, 16500), (53, 16566), (54, 16569), (57, 16587), (71, 16680), (74, 16701), (79, 16722), (101, 16839), (104, 16857), (120, 16950), (144, 17052), (149, 17085), (152, 17097), (153, 17100), (157, 17136),

Gene: Hyperion\_27 Start: 17443, Stop: 18390, Start Num: 21

Candidate Starts for Hyperion\_27:

(Start: 21 @17443 has 179 MA's), (33, 17467), (42, 17515), (51, 17563), (130, 18010), (131, 18013), (157, 18130), (180, 18235),

Gene: ImtiyazSitla\_17 Start: 14246, Stop: 15046, Start Num: 25

Candidate Starts for ImtiyazSitla\_17:

(Start: 25 @14246 has 282 MA's), (41, 14309), (52, 14366), (53, 14375), (54, 14378), (68, 14474), (74, 14510), (97, 14627), (120, 14759), (123, 14774), (127, 14795), (130, 14825), (149, 14894), (157, 14945), (163, 14966), (173, 15020), (174, 15023),

Gene: Imvubu\_15 Start: 13940, Stop: 14740, Start Num: 27

Candidate Starts for Imvubu\_15:

(Start: 27 @13940 has 11 MA's), (41, 14006), (43, 14012), (50, 14051), (54, 14075), (61, 14126), (71, 14186), (72, 14198), (73, 14201), (74, 14207), (92, 14300), (120, 14456), (141, 14549), (146, 14567), (149, 14591), (157, 14636), (163, 14657), (176, 14729),

Gene: Inchworm\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for Inchworm\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: Indlovu\_18 Start: 16278, Stop: 17087, Start Num: 27

Candidate Starts for Indlovu\_18:

(Start: 27 @16278 has 11 MA's), (41, 16344), (54, 16413), (61, 16464), (72, 16536), (73, 16539), (74, 16545), (82, 16587), (90, 16632), (101, 16683), (115, 16764), (120, 16794), (141, 16896), (149, 16938), (157, 16983),

Gene: Inspectinfecti\_25 Start: 19217, Stop: 19903, Start Num: 21

Candidate Starts for Inspectinfecti\_25:

(Start: 21 @19217 has 179 MA's), (36, 19256), (41, 19286), (52, 19343), (74, 19487), (83, 19532), (93, 19586), (103, 19619), (132, 19775), (151, 19853), (153, 19859),

Gene: Inverness\_18 Start: 14707, Stop: 15507, Start Num: 25

Candidate Starts for Inverness\_18:

(Start: 25 @14707 has 282 MA's), (41, 14770), (52, 14827), (53, 14836), (54, 14839), (68, 14935), (74, 14971), (97, 15088), (120, 15220), (123, 15235), (127, 15256), (130, 15286), (149, 15355), (157, 15406), (163, 15427), (173, 15481), (174, 15484),

Gene: Iridoclysis\_18 Start: 14679, Stop: 15479, Start Num: 25

Candidate Starts for Iridoclysis\_18:

(Start: 25 @14679 has 282 MA's), (41, 14742), (52, 14799), (53, 14808), (54, 14811), (68, 14907), (74, 14943), (97, 15060), (120, 15192), (123, 15207), (127, 15228), (130, 15258), (149, 15327), (157, 15378), (163, 15399), (173, 15453), (174, 15456),

Gene: IsaacEli\_18 Start: 14711, Stop: 15511, Start Num: 25

Candidate Starts for IsaacEli\_18:

(Start: 25 @14711 has 282 MA's), (41, 14774), (52, 14831), (53, 14840), (54, 14843), (68, 14939), (74, 14975), (97, 15092), (120, 15224), (123, 15239), (127, 15260), (130, 15290), (149, 15359), (157, 15410), (163, 15431), (173, 15485), (174, 15488),

Gene: JAMaL\_18 Start: 16621, Stop: 17427, Start Num: 24

Candidate Starts for JAMaL\_18:

(Start: 24 @16621 has 21 MA's), (41, 16684), (53, 16750), (54, 16753), (57, 16771), (71, 16864), (74, 16885), (79, 16906), (104, 17041), (120, 17134), (130, 17200), (143, 17233), (144, 17236), (149, 17269), (157, 17320), (163, 17341), (174, 17398),

Gene: JDog\_17 Start: 14414, Stop: 15214, Start Num: 25

Candidate Starts for JDog\_17:

(Start: 25 @14414 has 282 MA's), (41, 14477), (52, 14534), (53, 14543), (54, 14546), (68, 14642), (74, 14678), (97, 14795), (120, 14927), (123, 14942), (127, 14963), (130, 14993), (149, 15062), (157, 15113), (163, 15134), (173, 15188), (174, 15191),

Gene: JKSyngboy\_22 Start: 18691, Stop: 19386, Start Num: 21

Candidate Starts for JKSyngboy\_22:

(Start: 21 @18691 has 179 MA's), (36, 18730), (64, 18892), (93, 19063), (95, 19075), (131, 19249), (156, 19366), (160, 19381),

Gene: Jabberwocky\_21 Start: 18506, Stop: 19201, Start Num: 21

Candidate Starts for Jabberwocky\_21:

(Start: 21 @18506 has 179 MA's), (30, 18515), (36, 18545), (52, 18632), (64, 18707), (71, 18755), (83, 18821), (93, 18878), (95, 18890), (103, 18911), (131, 19064), (156, 19181), (160, 19196),

Gene: JacAttac\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for JacAttac\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: JaguarMi\_19 Start: 16267, Stop: 17073, Start Num: 24

Candidate Starts for JaguarMi\_19:

(Start: 24 @16267 has 21 MA's), (41, 16330), (54, 16399), (57, 16417), (71, 16510), (74, 16531), (79, 16552), (104, 16687), (120, 16780), (144, 16882), (149, 16915), (152, 16927), (153, 16930), (157, 16966),

Gene: JakeO\_17 Start: 14414, Stop: 15214, Start Num: 25

Candidate Starts for JakeO\_17:

(Start: 25 @14414 has 282 MA's), (41, 14477), (52, 14534), (53, 14543), (54, 14546), (68, 14642), (74, 14678), (97, 14795), (120, 14927), (123, 14942), (127, 14963), (130, 14993), (149, 15062), (157, 15113), (163, 15134), (173, 15188), (174, 15191),

Gene: Jambalaya\_22 Start: 14935, Stop: 15621, Start Num: 21

Candidate Starts for Jambalaya\_22:

(Start: 21 @14935 has 179 MA's), (48, 15034), (74, 15205), (75, 15208), (98, 15328), (148, 15556), (149, 15559),

Gene: JangoPhett\_18 Start: 14691, Stop: 15491, Start Num: 25

Candidate Starts for JangoPhett\_18:

(Start: 25 @14691 has 282 MA's), (41, 14754), (52, 14811), (53, 14820), (54, 14823), (68, 14919), (74, 14955), (97, 15072), (120, 15204), (123, 15219), (127, 15240), (130, 15270), (149, 15339), (157, 15390), (163, 15411), (173, 15465), (174, 15468),

Gene: Jayden\_31 Start: 17251, Stop: 17931, Start Num: 21

Candidate Starts for Jayden\_31:

(Start: 21 @17251 has 179 MA's), (42, 17323), (45, 17338), (50, 17362), (64, 17449), (71, 17497), (82, 17557), (115, 17698), (123, 17746), (130, 17800), (149, 17860),

Gene: Jefe\_30 Start: 17252, Stop: 17932, Start Num: 21

Candidate Starts for Jefe\_30:

(Start: 21 @17252 has 179 MA's), (45, 17339), (50, 17363), (61, 17438), (64, 17450), (71, 17498), (82, 17558), (111, 17687), (115, 17699), (123, 17747), (130, 17801), (149, 17861),

Gene: Jehoshaphat\_30 Start: 17965, Stop: 18912, Start Num: 21

Candidate Starts for Jehoshaphat\_30:

(Start: 21 @17965 has 179 MA's), (33, 17989), (42, 18037), (51, 18085), (131, 18535), (157, 18652), (180, 18757), (187, 18832),

Gene: Jillium\_17 Start: 14412, Stop: 15212, Start Num: 25

Candidate Starts for Jillium\_17:

(Start: 25 @14412 has 282 MA's), (41, 14475), (52, 14532), (53, 14541), (54, 14544), (68, 14640), (74, 14676), (97, 14793), (120, 14925), (123, 14940), (127, 14961), (130, 14991), (149, 15060), (157, 15111), (163, 15132), (173, 15186), (174, 15189),

Gene: Jiminy\_17 Start: 14254, Stop: 15054, Start Num: 25

Candidate Starts for Jiminy\_17:

(Start: 25 @14254 has 282 MA's), (41, 14317), (52, 14374), (53, 14383), (54, 14386), (68, 14482), (74, 14518), (97, 14635), (120, 14767), (123, 14782), (127, 14803), (130, 14833), (149, 14902), (157, 14953), (173, 15028), (174, 15031),

Gene: Jiraiya\_18 Start: 14414, Stop: 15214, Start Num: 25

Candidate Starts for Jiraiya\_18:

(Start: 25 @14414 has 282 MA's), (41, 14477), (52, 14534), (53, 14543), (54, 14546), (68, 14642), (74, 14678), (97, 14795), (120, 14927), (123, 14942), (127, 14963), (130, 14993), (149, 15062), (157, 15113), (163, 15134), (173, 15188), (174, 15191),

Gene: Jolie1\_016 Start: 14954, Stop: 15760, Start Num: 27

Candidate Starts for Jolie1\_016:

(Start: 27 @14954 has 11 MA's), (53, 15083), (54, 15086), (56, 15098), (71, 15197), (73, 15212), (74, 15218), (97, 15341), (127, 15509), (129, 15524), (130, 15539), (157, 15659),

Gene: Jollipop\_30 Start: 17597, Stop: 18277, Start Num: 21

Candidate Starts for Jollipop\_30:

(Start: 21 @17597 has 179 MA's), (45, 17684), (50, 17708), (61, 17783), (64, 17795), (71, 17843), (82, 17903), (111, 18032), (115, 18044), (123, 18092), (130, 18146), (149, 18206),

Gene: Jollymon\_50 Start: 27058, Stop: 27801, Start Num: 29

Candidate Starts for Jollymon\_50:

(Start: 29 @27058 has 3 MA's), (31, 27064), (48, 27148), (54, 27187), (61, 27238), (74, 27319), (78, 27337), (87, 27388), (88, 27394), (90, 27406), (106, 27493), (114, 27526), (120, 27565), (126, 27595), (149, 27703),

Gene: Judebell\_30 Start: 17473, Stop: 18420, Start Num: 21

Candidate Starts for Judebell\_30:

(Start: 21 @17473 has 179 MA's), (33, 17497), (42, 17545), (51, 17593), (130, 18040), (131, 18043), (157, 18160), (180, 18265), (187, 18340),

Gene: KLucky39\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for KLucky39\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Kahve\_17 Start: 14421, Stop: 15221, Start Num: 25

Candidate Starts for Kahve\_17:

(Start: 25 @14421 has 282 MA's), (41, 14484), (52, 14541), (53, 14550), (54, 14553), (68, 14649), (74, 14685), (97, 14802), (120, 14934), (123, 14949), (127, 14970), (130, 15000), (149, 15069), (157, 15120), (163, 15141), (173, 15195), (174, 15198),

Gene: KaiHaiDragon\_30 Start: 17191, Stop: 17871, Start Num: 21

Candidate Starts for KaiHaiDragon\_30:

(Start: 21 @17191 has 179 MA's), (45, 17278), (50, 17302), (61, 17377), (64, 17389), (71, 17437), (82, 17497), (111, 17626), (115, 17638), (123, 17686), (130, 17740), (149, 17800),

Gene: Kailash\_18 Start: 14708, Stop: 15508, Start Num: 25

Candidate Starts for Kailash\_18:

(Start: 25 @14708 has 282 MA's), (41, 14771), (52, 14828), (53, 14837), (54, 14840), (68, 14936), (74, 14972), (97, 15089), (120, 15221), (123, 15236), (127, 15257), (130, 15287), (149, 15356), (157, 15407), (163, 15428), (173, 15482), (174, 15485),

Gene: Kamashten\_24 Start: 19151, Stop: 19846, Start Num: 21

Candidate Starts for Kamashten\_24:

(Start: 21 @19151 has 179 MA's), (30, 19160), (36, 19190), (52, 19277), (64, 19352), (93, 19523), (95, 19535), (103, 19556), (131, 19709), (156, 19826),

Gene: KarasumaRum\_22 Start: 16657, Stop: 17460, Start Num: 27

Candidate Starts for KarasumaRum\_22:

(Start: 13 @16624 has 9 MA's), (Start: 27 @16657 has 11 MA's), (50, 16765), (51, 16771), (53, 16786), (54, 16789), (57, 16807), (74, 16921), (127, 17206), (130, 17236), (149, 17305),

Gene: Katniss\_18 Start: 14718, Stop: 15518, Start Num: 25

Candidate Starts for Katniss\_18:

(Start: 25 @14718 has 282 MA's), (41, 14781), (52, 14838), (53, 14847), (54, 14850), (68, 14946), (74, 14982), (97, 15099), (120, 15231), (123, 15246), (127, 15267), (130, 15297), (149, 15366), (157, 15417), (163, 15438), (173, 15492), (174, 15495),

Gene: KayaCho\_16 Start: 14971, Stop: 15777, Start Num: 27

Candidate Starts for KayaCho\_16:

(14, 14944), (19, 14962), (Start: 27 @14971 has 11 MA's), (53, 15100), (54, 15103), (56, 15115), (71, 15214), (73, 15229), (74, 15235), (97, 15358), (127, 15526), (129, 15541), (157, 15676),

Gene: Keitabear\_25 Start: 20691, Stop: 21386, Start Num: 21

Candidate Starts for Keitabear\_25:

(Start: 21 @20691 has 179 MA's), (30, 20700), (36, 20730), (52, 20817), (64, 20892), (83, 21006), (93, 21063), (95, 21075), (103, 21096), (131, 21249), (156, 21366),

Gene: Keitherie\_18 Start: 14719, Stop: 15519, Start Num: 25

Candidate Starts for Keitherie\_18:

(Start: 25 @14719 has 282 MA's), (41, 14782), (52, 14839), (53, 14848), (54, 14851), (68, 14947), (74, 14983), (97, 15100), (120, 15232), (123, 15247), (127, 15268), (130, 15298), (149, 15367), (157, 15418), (173, 15493), (174, 15496),

Gene: Kelcole\_26 Start: 16133, Stop: 17074, Start Num: 21

Candidate Starts for Kelcole\_26:

(Start: 21 @16133 has 179 MA's), (37, 16178), (87, 16472), (123, 16643), (130, 16697), (131, 16700), (153, 16778), (166, 16847), (167, 16853), (168, 16868), (188, 17012),

Gene: Kewpiedoll\_24 Start: 18532, Stop: 19227, Start Num: 21

Candidate Starts for Kewpiedoll\_24:

(Start: 21 @18532 has 179 MA's), (30, 18541), (36, 18571), (52, 18658), (64, 18733), (83, 18847), (93, 18904), (95, 18916), (103, 18937), (131, 19090), (156, 19207), (160, 19222),

Gene: Kikipoo\_18 Start: 14711, Stop: 15511, Start Num: 25

Candidate Starts for Kikipoo\_18:

(Start: 25 @14711 has 282 MA's), (41, 14774), (52, 14831), (53, 14840), (54, 14843), (68, 14939), (74, 14975), (97, 15092), (120, 15224), (123, 15239), (127, 15260), (130, 15290), (149, 15359), (157, 15410), (163, 15431), (173, 15485), (174, 15488),

Gene: Kimbrough\_18 Start: 14409, Stop: 15209, Start Num: 25

Candidate Starts for Kimbrough\_18:

(Start: 25 @14409 has 282 MA's), (41, 14472), (52, 14529), (53, 14538), (54, 14541), (68, 14637), (74, 14673), (97, 14790), (120, 14922), (123, 14937), (127, 14958), (130, 14988), (149, 15057), (157, 15108), (163, 15129), (173, 15183), (174, 15186),

Gene: KimmyK\_24 Start: 15824, Stop: 16510, Start Num: 21

Candidate Starts for KimmyK\_24:

(Start: 21 @15824 has 179 MA's), (48, 15923), (74, 16094), (75, 16097), (98, 16217), (148, 16445), (149, 16448),

Gene: KingTut\_17 Start: 14401, Stop: 15201, Start Num: 25

Candidate Starts for KingTut\_17:

(Start: 25 @14401 has 282 MA's), (41, 14464), (52, 14521), (53, 14530), (54, 14533), (68, 14629), (74, 14665), (97, 14782), (120, 14914), (123, 14929), (127, 14950), (130, 14980), (149, 15049), (157, 15100), (163, 15121), (173, 15175), (174, 15178),

Gene: KingVeVeVe\_18 Start: 14688, Stop: 15488, Start Num: 25

Candidate Starts for KingVeVeVe\_18:

(Start: 25 @14688 has 282 MA's), (41, 14751), (52, 14808), (53, 14817), (54, 14820), (68, 14916), (74, 14952), (97, 15069), (120, 15201), (123, 15216), (127, 15237), (130, 15267), (149, 15336), (157, 15387), (163, 15408), (173, 15462), (174, 15465),

Gene: KingstonB\_50 Start: 26536, Stop: 27279, Start Num: 29

Candidate Starts for KingstonB\_50:

(Start: 29 @26536 has 3 MA's), (31, 26542), (48, 26626), (54, 26665), (61, 26716), (74, 26797), (78, 26815), (87, 26866), (88, 26872), (90, 26884), (106, 26971), (114, 27004), (126, 27073), (149, 27181),

Gene: Kithara\_28 Start: 17876, Stop: 18832, Start Num: 16

Candidate Starts for Kithara\_28:

(Start: 16 @17876 has 12 MA's), (37, 17930), (51, 18005), (68, 18119), (71, 18134), (73, 18149), (75, 18158), (78, 18173), (85, 18212), (93, 18257), (109, 18329), (111, 18338), (131, 18452), (149, 18527), (164, 18605), (170, 18641), (189, 18797),

Gene: KlimbOn\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for KlimbOn\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Kloppinator\_18 Start: 14715, Stop: 15515, Start Num: 25

Candidate Starts for Kloppinator\_18:

(Start: 25 @14715 has 282 MA's), (41, 14778), (52, 14835), (53, 14844), (54, 14847), (68, 14943), (74, 14979), (97, 15096), (120, 15228), (123, 15243), (127, 15264), (130, 15294), (149, 15363), (157, 15414), (163, 15435), (173, 15489), (174, 15492),

Gene: Knocker\_22 Start: 18789, Stop: 19589, Start Num: 27

Candidate Starts for Knocker\_22:



(Start: 27 @18789 has 11 MA's), (41, 18855), (52, 18912), (54, 18924), (61, 18975), (71, 19035), (72, 19047), (74, 19056), (82, 19098), (92, 19149), (93, 19155), (115, 19275), (130, 19371), (141, 19398), (146, 19416), (149, 19440), (157, 19485),

Gene: Kowalski\_29 Start: 17307, Stop: 17987, Start Num: 21

Candidate Starts for Kowalski\_29:

(Start: 21 @17307 has 179 MA's), (45, 17394), (50, 17418), (61, 17493), (64, 17505), (71, 17553), (82, 17613), (111, 17742), (115, 17754), (123, 17802), (130, 17856), (149, 17916),

Gene: Kozie\_26 Start: 16975, Stop: 17667, Start Num: 21

Candidate Starts for Kozie\_26:

(15, 16963), (Start: 21 @16975 has 179 MA's), (37, 17020), (50, 17086), (58, 17134), (61, 17161), (64, 17173), (66, 17200), (82, 17284), (108, 17398), (115, 17425), (131, 17530), (149, 17596),

Gene: Kroos\_24 Start: 18774, Stop: 19469, Start Num: 21

Candidate Starts for Kroos\_24:

(Start: 21 @18774 has 179 MA's), (36, 18813), (64, 18975), (93, 19146), (95, 19158), (131, 19332), (156, 19449), (160, 19464),

Gene: Kwadwo\_17 Start: 14400, Stop: 15200, Start Num: 25

Candidate Starts for Kwadwo\_17:

(Start: 25 @14400 has 282 MA's), (41, 14463), (52, 14520), (53, 14529), (54, 14532), (68, 14628), (74, 14664), (97, 14781), (120, 14913), (123, 14928), (127, 14949), (130, 14979), (149, 15048), (157, 15099), (163, 15120), (173, 15174), (174, 15177),

Gene: Kwekel\_23 Start: 17125, Stop: 17814, Start Num: 20

Candidate Starts for Kwekel\_23:

(Start: 20 @17125 has 16 MA's), (30, 17134), (33, 17149), (36, 17164), (48, 17224), (50, 17239), (52, 17251), (93, 17494), (95, 17506), (117, 17590), (130, 17677), (139, 17704), (143, 17716), (151, 17761),

Gene: Kwksand96\_17 Start: 14264, Stop: 15064, Start Num: 25

Candidate Starts for Kwksand96\_17:

(Start: 25 @14264 has 282 MA's), (41, 14327), (52, 14384), (53, 14393), (54, 14396), (68, 14492), (74, 14528), (97, 14645), (120, 14777), (123, 14792), (127, 14813), (130, 14843), (149, 14912), (157, 14963), (173, 15038), (174, 15041),

Gene: Kwobi\_24 Start: 18757, Stop: 19452, Start Num: 21

Candidate Starts for Kwobi\_24:

(8, 18697), (Start: 21 @18757 has 179 MA's), (36, 18796), (64, 18958), (93, 19129), (95, 19141), (156, 19432), (160, 19447),

Gene: Kyva\_30 Start: 17718, Stop: 18641, Start Num: 33

Candidate Starts for Kyva\_30:

(Start: 21 @17694 has 179 MA's), (33, 17718), (42, 17766), (51, 17814), (130, 18261), (131, 18264), (157, 18381), (180, 18486), (187, 18561),

Gene: Labeouficaum\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Labeouficaum\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Lambano\_17 Start: 15373, Stop: 16179, Start Num: 24

Candidate Starts for Lambano\_17:

(Start: 24 @15373 has 21 MA's), (41, 15436), (53, 15502), (54, 15505), (57, 15523), (71, 15616), (74, 15637), (79, 15658), (104, 15793), (120, 15886), (130, 15952), (143, 15985), (144, 15988), (149, 16021), (157, 16072), (163, 16093), (174, 16150),

Gene: LasagnaCat\_18 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for LasagnaCat\_18:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),

Gene: Lasso\_18 Start: 14678, Stop: 15478, Start Num: 25

Candidate Starts for Lasso\_18:

(Start: 25 @14678 has 282 MA's), (41, 14741), (52, 14798), (53, 14807), (54, 14810), (68, 14906), (74, 14942), (97, 15059), (120, 15191), (123, 15206), (127, 15227), (130, 15257), (149, 15326), (157, 15377), (163, 15398), (173, 15452), (174, 15455),

Gene: LeeLot\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for LeeLot\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Lego3393\_18 Start: 14715, Stop: 15515, Start Num: 25

Candidate Starts for Lego3393\_18:

(Start: 25 @14715 has 282 MA's), (41, 14778), (52, 14835), (53, 14844), (54, 14847), (68, 14943), (74, 14979), (97, 15096), (120, 15228), (123, 15243), (127, 15264), (130, 15294), (149, 15363), (157, 15414), (163, 15435), (173, 15489), (174, 15492),

Gene: Legolas\_17 Start: 14416, Stop: 15216, Start Num: 25

Candidate Starts for Legolas\_17:

(Start: 25 @14416 has 282 MA's), (41, 14479), (52, 14536), (53, 14545), (54, 14548), (68, 14644), (74, 14680), (97, 14797), (120, 14929), (123, 14944), (127, 14965), (130, 14995), (149, 15064), (157, 15115), (163, 15136), (173, 15190), (174, 15193),

Gene: LeiMonet\_18 Start: 14408, Stop: 15208, Start Num: 25

Candidate Starts for LeiMonet\_18:

(Start: 25 @14408 has 282 MA's), (41, 14471), (52, 14528), (53, 14537), (54, 14540), (68, 14636), (74, 14672), (97, 14789), (120, 14921), (123, 14936), (127, 14957), (130, 14987), (149, 15056), (157, 15107), (163, 15128), (173, 15182), (174, 15185),

Gene: LemonSlice\_18 Start: 14410, Stop: 15210, Start Num: 25

Candidate Starts for LemonSlice\_18:

(Start: 25 @14410 has 282 MA's), (41, 14473), (52, 14530), (53, 14539), (54, 14542), (68, 14638), (74, 14674), (97, 14791), (120, 14923), (123, 14938), (127, 14959), (130, 14989), (149, 15058), (157, 15109), (163, 15130), (173, 15184), (174, 15187),

Gene: Lennon\_25 Start: 19794, Stop: 20489, Start Num: 21

Candidate Starts for Lennon\_25:

(Start: 21 @19794 has 179 MA's), (30, 19803), (36, 19833), (52, 19920), (64, 19995), (71, 20043), (93, 20166), (95, 20178), (103, 20199), (131, 20352), (156, 20469),

Gene: Leonard\_24 Start: 18794, Stop: 19480, Start Num: 21

Candidate Starts for Leonard\_24:

(Start: 21 @18794 has 179 MA's), (36, 18833), (41, 18863), (52, 18920), (74, 19064), (83, 19109), (93, 19163), (103, 19196), (132, 19352), (151, 19430), (153, 19436),

Gene: Ligma\_18 Start: 14690, Stop: 15502, Start Num: 26

Candidate Starts for Ligma\_18:

(Start: 26 @14690 has 5 MA's), (33, 14708), (48, 14783), (52, 14810), (54, 14822), (60, 14867), (74, 14954), (79, 14975), (120, 15200), (126, 15230), (127, 15236), (149, 15338), (163, 15410), (174, 15467),

Gene: LilHam\_21 Start: 17354, Stop: 18049, Start Num: 21

Candidate Starts for LilHam\_21:

(Start: 21 @17354 has 179 MA's), (36, 17393), (64, 17555), (93, 17726), (95, 17738), (131, 17912), (156, 18029), (160, 18044),

Gene: LilMcDreamy\_18 Start: 16876, Stop: 17679, Start Num: 27

Candidate Starts for LilMcDreamy\_18:

(Start: 27 @16876 has 11 MA's), (39, 16924), (50, 16984), (53, 17005), (54, 17008), (71, 17119), (74, 17140), (100, 17278), (104, 17299), (127, 17428), (130, 17458), (141, 17485), (149, 17527),

Gene: Lilbeanie\_21 Start: 14165, Stop: 14857, Start Num: 21

Candidate Starts for Lilbeanie\_21:

(Start: 21 @14165 has 179 MA's), (36, 14204), (48, 14267), (50, 14282), (85, 14495), (93, 14537), (148, 14792), (153, 14810),

Gene: LittleFortune\_31 Start: 17557, Stop: 18237, Start Num: 21

Candidate Starts for LittleFortune\_31:

(Start: 21 @17557 has 179 MA's), (45, 17644), (50, 17668), (61, 17743), (64, 17755), (71, 17803), (82, 17863), (111, 17992), (115, 18004), (123, 18052), (130, 18106), (149, 18166),

Gene: LittleMunchkin\_19 Start: 16116, Stop: 16928, Start Num: 26

Candidate Starts for LittleMunchkin\_19:

(Start: 26 @16116 has 5 MA's), (33, 16134), (48, 16209), (50, 16224), (53, 16245), (54, 16248), (74, 16380), (79, 16401), (81, 16419), (83, 16425), (127, 16662), (149, 16764), (153, 16779), (163, 16836), (174, 16893), (179, 16917),

Gene: Llemily\_28 Start: 16741, Stop: 17688, Start Num: 21

Candidate Starts for Llemily\_28:

(Start: 21 @16741 has 179 MA's), (33, 16765), (42, 16813), (51, 16861), (131, 17311), (157, 17428), (180, 17533), (187, 17608),

Gene: Lolalove\_18 Start: 16434, Stop: 17240, Start Num: 24

Candidate Starts for Lolalove\_18:

(Start: 24 @16434 has 21 MA's), (41, 16497), (53, 16563), (54, 16566), (57, 16584), (71, 16677), (74, 16698), (79, 16719), (101, 16836), (104, 16854), (120, 16947), (144, 17049), (149, 17082), (152, 17094), (153, 17097), (157, 17133),

Gene: Lonelysoil\_27 Start: 16986, Stop: 17933, Start Num: 21

Candidate Starts for Lonelysoil\_27:

(Start: 21 @16986 has 179 MA's), (33, 17010), (42, 17058), (51, 17106), (131, 17556), (157, 17673), (180, 17778), (187, 17853),

Gene: Longacauda\_17 Start: 14402, Stop: 15202, Start Num: 25

Candidate Starts for Longacauda\_17:

(Start: 25 @14402 has 282 MA's), (41, 14465), (52, 14522), (53, 14531), (54, 14534), (68, 14630), (74, 14666), (97, 14783), (120, 14915), (123, 14930), (127, 14951), (130, 14981), (149, 15050), (157, 15101), (163, 15122), (173, 15176), (174, 15179),

Gene: Lopsy\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Lopsy\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: LostAndPhound\_17 Start: 14412, Stop: 15212, Start Num: 25

Candidate Starts for LostAndPhound\_17:

(Start: 25 @14412 has 282 MA's), (41, 14475), (52, 14532), (53, 14541), (54, 14544), (68, 14640), (74, 14676), (97, 14793), (120, 14925), (123, 14940), (127, 14961), (130, 14991), (149, 15060), (157, 15111), (163, 15132), (173, 15186), (174, 15189),

Gene: Love\_25 Start: 18669, Stop: 19364, Start Num: 21

Candidate Starts for Love\_25:

(Start: 21 @18669 has 179 MA's), (30, 18678), (36, 18708), (52, 18795), (64, 18870), (83, 18984), (93, 19041), (95, 19053), (103, 19074), (131, 19227), (156, 19344), (160, 19359),

Gene: LuckyMarjie\_17 Start: 14424, Stop: 15224, Start Num: 25

Candidate Starts for LuckyMarjie\_17:

(Start: 25 @14424 has 282 MA's), (41, 14487), (52, 14544), (53, 14553), (54, 14556), (68, 14652), (74, 14688), (97, 14805), (120, 14937), (123, 14952), (127, 14973), (130, 15003), (149, 15072), (157, 15123), (163, 15144), (173, 15198), (174, 15201),

Gene: Lulumae\_17 Start: 14401, Stop: 15201, Start Num: 25

Candidate Starts for Lulumae\_17:

(Start: 25 @14401 has 282 MA's), (41, 14464), (52, 14521), (53, 14530), (54, 14533), (68, 14629), (74, 14665), (97, 14782), (120, 14914), (123, 14929), (127, 14950), (130, 14980), (149, 15049), (157, 15100), (163, 15121), (173, 15175), (174, 15178),

Gene: Lulwa\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for Lulwa\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: Lumine\_17 Start: 14394, Stop: 15194, Start Num: 25

Candidate Starts for Lumine\_17:

(Start: 25 @14394 has 282 MA's), (41, 14457), (52, 14514), (53, 14523), (54, 14526), (68, 14622), (74, 14658), (97, 14775), (120, 14907), (123, 14922), (127, 14943), (130, 14973), (149, 15042), (157, 15093), (163, 15114), (173, 15168), (174, 15171),

Gene: MRabcd\_17 Start: 14403, Stop: 15203, Start Num: 25

Candidate Starts for MRabcd\_17:

(Start: 25 @14403 has 282 MA's), (41, 14466), (52, 14523), (53, 14532), (54, 14535), (68, 14631), (74, 14667), (97, 14784), (120, 14916), (123, 14931), (127, 14952), (130, 14982), (149, 15051), (157, 15102), (163, 15123), (173, 15177), (174, 15180),

Gene: Mag7\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Mag7\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Magic8\_18 Start: 14696, Stop: 15496, Start Num: 25

Candidate Starts for Magic8\_18:

(Start: 25 @14696 has 282 MA's), (41, 14759), (52, 14816), (53, 14825), (54, 14828), (68, 14924), (74, 14960), (97, 15077), (120, 15209), (123, 15224), (127, 15245), (130, 15275), (149, 15344), (157, 15395), (163, 15416), (173, 15470), (174, 15473),

Gene: Magpie\_18 Start: 16625, Stop: 17431, Start Num: 24

Candidate Starts for Magpie\_18:

(Start: 24 @16625 has 21 MA's), (41, 16688), (53, 16754), (54, 16757), (57, 16775), (71, 16868), (74, 16889), (79, 16910), (101, 17027), (104, 17045), (120, 17138), (144, 17240), (149, 17273), (152, 17285), (153, 17288), (157, 17324),

Gene: Maih\_16 Start: 16945, Stop: 17643, Start Num: 22

Candidate Starts for Maih\_16:

(Start: 22 @16945 has 12 MA's), (35, 16975), (39, 16993), (48, 17035), (49, 17047), (52, 17062), (54, 17074), (71, 17185), (74, 17206), (83, 17251), (96, 17317), (108, 17362), (124, 17437), (130, 17485), (131, 17488), (139, 17518), (143, 17530), (149, 17566), (162, 17632),

Gene: MakoManhole\_20 Start: 16106, Stop: 16915, Start Num: 25

Candidate Starts for MakoManhole\_20:

(Start: 25 @16106 has 282 MA's), (33, 16124), (48, 16199), (54, 16238), (60, 16283), (74, 16370), (79, 16391), (81, 16409), (83, 16415), (90, 16457), (127, 16652), (149, 16754), (163, 16826), (174, 16883),

Gene: Mana\_17 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for Mana\_17:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Manad\_17 Start: 14256, Stop: 15056, Start Num: 25

Candidate Starts for Manad\_17:

(Start: 25 @14256 has 282 MA's), (41, 14319), (52, 14376), (53, 14385), (54, 14388), (68, 14484), (74, 14520), (97, 14637), (120, 14769), (123, 14784), (127, 14805), (130, 14835), (149, 14904), (157, 14955), (163, 14976), (173, 15030), (174, 15033),

Gene: Marcie\_32 Start: 16766, Stop: 17707, Start Num: 21

Candidate Starts for Marcie\_32:

(Start: 21 @16766 has 179 MA's), (37, 16811), (87, 17105), (123, 17276), (130, 17330), (131, 17333), (138, 17351), (153, 17411), (166, 17480), (167, 17486), (168, 17501), (184, 17603), (188, 17645),

Gene: Mareelih\_87 Start: 43849, Stop: 44493, Start Num: 21

Candidate Starts for Mareelih\_87:

(Start: 21 @43849 has 179 MA's), (37, 43891), (50, 43960), (113, 44296), (119, 44320), (120, 44332), (121, 44335), (128, 44374),

Gene: Margaery\_25 Start: 16606, Stop: 17301, Start Num: 21

Candidate Starts for Margaery\_25:

(15, 16594), (Start: 21 @16606 has 179 MA's), (50, 16717), (54, 16741), (61, 16792), (64, 16804), (71, 16852), (77, 16888), (82, 16915), (108, 17029), (115, 17056), (130, 17158), (156, 17272),

Gene: Mariokart\_18 Start: 14585, Stop: 15397, Start Num: 25

Candidate Starts for Mariokart\_18:

(Start: 25 @14585 has 282 MA's), (33, 14603), (54, 14717), (61, 14768), (74, 14849), (79, 14870), (81, 14888), (116, 15068), (123, 15110), (126, 15125), (127, 15131), (145, 15203), (149, 15233), (163, 15305), (174, 15362),

Gene: Maru\_17 Start: 14404, Stop: 15204, Start Num: 25

Candidate Starts for Maru\_17:

(Start: 25 @14404 has 282 MA's), (41, 14467), (52, 14524), (53, 14533), (54, 14536), (68, 14632), (74, 14668), (97, 14785), (120, 14917), (123, 14932), (127, 14953), (130, 14983), (149, 15052), (157, 15103), (163, 15124), (173, 15178), (174, 15181),

Gene: Mashley\_26 Start: 17257, Stop: 18204, Start Num: 21

Candidate Starts for Mashley\_26:

(Start: 21 @17257 has 179 MA's), (33, 17281), (42, 17329), (51, 17377), (130, 17824), (131, 17827), (157, 17944), (180, 18049),

Gene: Maskar\_17 Start: 14246, Stop: 15046, Start Num: 25

Candidate Starts for Maskar\_17:

(Start: 25 @14246 has 282 MA's), (41, 14309), (52, 14366), (53, 14375), (54, 14378), (68, 14474), (74, 14510), (97, 14627), (120, 14759), (123, 14774), (127, 14795), (130, 14825), (149, 14894), (157, 14945), (163, 14966), (173, 15020), (174, 15023),

Gene: Matalotodo\_18 Start: 14694, Stop: 15494, Start Num: 25

Candidate Starts for Matalotodo\_18:

(Start: 25 @14694 has 282 MA's), (41, 14757), (52, 14814), (53, 14823), (54, 14826), (68, 14922), (74, 14958), (97, 15075), (120, 15207), (123, 15222), (127, 15243), (130, 15273), (149, 15342), (157, 15393), (163, 15414), (173, 15468), (174, 15471),

Gene: Matzah\_26 Start: 16640, Stop: 17332, Start Num: 21

Candidate Starts for Matzah\_26:

(15, 16628), (Start: 21 @16640 has 179 MA's), (37, 16685), (50, 16751), (54, 16775), (61, 16826), (64, 16838), (71, 16886), (77, 16922), (82, 16949), (108, 17063), (115, 17090), (130, 17192), (131, 17195), (156, 17306),

Gene: McKinley\_24 Start: 18700, Stop: 19395, Start Num: 21

Candidate Starts for McKinley\_24:

(Start: 21 @18700 has 179 MA's), (30, 18709), (36, 18739), (52, 18826), (64, 18901), (83, 19015), (93, 19072), (95, 19084), (103, 19105), (131, 19258), (156, 19375), (160, 19390),

Gene: Mcshane\_17 Start: 14400, Stop: 15200, Start Num: 25

Candidate Starts for Mcshane\_17:

(Start: 25 @14400 has 282 MA's), (41, 14463), (52, 14520), (53, 14529), (54, 14532), (68, 14628), (74, 14664), (97, 14781), (120, 14913), (123, 14928), (127, 14949), (130, 14979), (149, 15048), (157, 15099), (163, 15120), (173, 15174), (174, 15177),

Gene: Mecca\_17 Start: 14397, Stop: 15197, Start Num: 25

Candidate Starts for Mecca\_17:

(Start: 25 @14397 has 282 MA's), (41, 14460), (52, 14517), (53, 14526), (54, 14529), (68, 14625), (74, 14661), (97, 14778), (120, 14910), (123, 14925), (127, 14946), (130, 14976), (149, 15045), (157,

15096), (163, 15117), (173, 15171), (174, 15174),

Gene: Megamind20\_18 Start: 14419, Stop: 15219, Start Num: 25

Candidate Starts for Megamind20\_18:

(Start: 25 @14419 has 282 MA's), (41, 14482), (52, 14539), (53, 14548), (54, 14551), (68, 14647), (74, 14683), (97, 14800), (120, 14932), (123, 14947), (127, 14968), (130, 14998), (149, 15067), (157, 15118), (163, 15139), (173, 15193), (174, 15196),

Gene: Megan\_24 Start: 18489, Stop: 19178, Start Num: 21

Candidate Starts for Megan\_24:

(Start: 21 @18489 has 179 MA's), (42, 18561), (46, 18579), (50, 18600), (61, 18675), (71, 18735), (82, 18795), (115, 18936), (123, 18984), (130, 19038), (149, 19110), (153, 19125),

Gene: Megatron\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Megatron\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: MelBins\_25 Start: 18998, Stop: 19684, Start Num: 21

Candidate Starts for MelBins\_25:

(Start: 21 @18998 has 179 MA's), (36, 19037), (52, 19124), (71, 19247), (83, 19313), (93, 19367), (103, 19400), (151, 19634), (153, 19640),

Gene: Melc17\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for Melc17\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: MellowYellow\_26 Start: 15987, Stop: 16907, Start Num: 16

Candidate Starts for MellowYellow\_26:

(Start: 16 @15987 has 12 MA's), (46, 16086), (48, 16092), (49, 16104), (52, 16119), (71, 16242), (79, 16284), (89, 16347), (111, 16443), (116, 16458), (125, 16509), (150, 16623), (151, 16629), (154, 16647), (156, 16665), (169, 16731), (186, 16827),

Gene: MelsMeow\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for MelsMeow\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (173, 15032), (174, 15035),

Gene: MementoMori\_26 Start: 16362, Stop: 17060, Start Num: 21

Candidate Starts for MementoMori\_26:

(15, 16350), (Start: 21 @16362 has 179 MA's), (50, 16473), (54, 16497), (61, 16548), (64, 16560), (71, 16608), (77, 16644), (82, 16671), (108, 16785), (115, 16812), (130, 16914), (156, 17028),

Gene: Merry\_30 Start: 17321, Stop: 17998, Start Num: 21

Candidate Starts for Merry\_30:

(Start: 21 @17321 has 179 MA's), (42, 17393), (45, 17408), (47, 17414), (54, 17456), (60, 17501), (61, 17507), (64, 17519), (66, 17546), (71, 17567), (82, 17627), (98, 17705), (108, 17741), (123, 17816), (130, 17870), (146, 17906), (149, 17930),

Gene: Mesh1\_18 Start: 14708, Stop: 15508, Start Num: 25

Candidate Starts for Mesh1\_18:

(Start: 25 @14708 has 282 MA's), (41, 14771), (52, 14828), (53, 14837), (54, 14840), (68, 14936), (74, 14972), (97, 15089), (120, 15221), (123, 15236), (127, 15257), (130, 15287), (149, 15356), (157, 15407), (163, 15428), (173, 15482), (174, 15485),

Gene: Metamorphoo\_30 Start: 17104, Stop: 17784, Start Num: 21

Candidate Starts for Metamorphoo\_30:

(Start: 21 @17104 has 179 MA's), (45, 17191), (60, 17284), (61, 17290), (64, 17302), (71, 17350), (82, 17410), (108, 17524), (123, 17599), (130, 17653), (149, 17713), (162, 17773),

Gene: MichaelPhcott\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for MichaelPhcott\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Mikota\_18 Start: 14685, Stop: 15485, Start Num: 25

Candidate Starts for Mikota\_18:

(Start: 25 @14685 has 282 MA's), (41, 14748), (52, 14805), (53, 14814), (54, 14817), (68, 14913), (74, 14949), (97, 15066), (120, 15198), (123, 15213), (127, 15234), (130, 15264), (149, 15333), (157, 15384), (163, 15405), (173, 15459), (174, 15462),

Gene: Mimi\_90 Start: 50513, Stop: 51169, Start Num: 21

Candidate Starts for Mimi\_90:

(Start: 21 @50513 has 179 MA's), (60, 50696), (74, 50783), (113, 50963), (120, 50999), (121, 51002),

Gene: MiniBoss\_18 Start: 14687, Stop: 15487, Start Num: 25

Candidate Starts for MiniBoss\_18:

(Start: 25 @14687 has 282 MA's), (41, 14750), (52, 14807), (53, 14816), (54, 14819), (68, 14915), (74, 14951), (97, 15068), (120, 15200), (123, 15215), (127, 15236), (130, 15266), (149, 15335), (157, 15386), (163, 15407), (173, 15461), (174, 15464),

Gene: Mischief19\_24 Start: 26870, Stop: 27550, Start Num: 22

Candidate Starts for Mischief19\_24:

(11, 26825), (12, 26831), (Start: 22 @26870 has 12 MA's), (37, 26909), (43, 26939), (52, 26990), (70, 27104), (73, 27128), (79, 27155), (87, 27200), (109, 27296), (126, 27377), (131, 27416), (136, 27422), (139, 27437), (143, 27449), (161, 27539),

Gene: MitKao\_18 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for MitKao\_18:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Mithril\_18 Start: 16440, Stop: 17246, Start Num: 24

Candidate Starts for Mithril\_18:

(Start: 24 @16440 has 21 MA's), (41, 16503), (53, 16569), (54, 16572), (57, 16590), (71, 16683), (74, 16704), (79, 16725), (101, 16842), (104, 16860), (120, 16953), (130, 17019), (144, 17055), (149, 17088), (152, 17100), (153, 17103), (157, 17139),

Gene: MoontowerMania\_22 Start: 17714, Stop: 18409, Start Num: 21

Candidate Starts for MoontowerMania\_22:



(Start: 21 @17714 has 179 MA's), (30, 17723), (36, 17753), (52, 17840), (64, 17915), (83, 18029), (93, 18086), (95, 18098), (103, 18119), (131, 18272), (156, 18389), (160, 18404),

Gene: Morgushi\_18 Start: 14410, Stop: 15210, Start Num: 25

Candidate Starts for Morgushi\_18:

(Start: 25 @14410 has 282 MA's), (41, 14473), (52, 14530), (53, 14539), (54, 14542), (68, 14638), (74, 14674), (97, 14791), (120, 14923), (123, 14938), (127, 14959), (130, 14989), (149, 15058), (157, 15109), (163, 15130), (173, 15184), (174, 15187),

Gene: MorillMayhem\_27 Start: 17280, Stop: 18203, Start Num: 33

Candidate Starts for MorillMayhem\_27:

(Start: 21 @17256 has 179 MA's), (33, 17280), (42, 17328), (51, 17376), (130, 17823), (131, 17826), (157, 17943), (180, 18048),

Gene: Morty\_18 Start: 14708, Stop: 15508, Start Num: 25

Candidate Starts for Morty\_18:

(Start: 25 @14708 has 282 MA's), (41, 14771), (52, 14828), (53, 14837), (54, 14840), (68, 14936), (74, 14972), (97, 15089), (120, 15221), (123, 15236), (127, 15257), (130, 15287), (149, 15356), (157, 15407), (163, 15428), (173, 15482), (174, 15485),

Gene: Mosaic\_17 Start: 14413, Stop: 15213, Start Num: 25

Candidate Starts for Mosaic\_17:

(Start: 25 @14413 has 282 MA's), (41, 14476), (52, 14533), (53, 14542), (54, 14545), (68, 14641), (74, 14677), (97, 14794), (120, 14926), (123, 14941), (127, 14962), (130, 14992), (149, 15061), (157, 15112), (163, 15133), (173, 15187), (174, 15190),

Gene: MossRose\_20 Start: 16085, Stop: 16894, Start Num: 25

Candidate Starts for MossRose\_20:

(Start: 25 @16085 has 282 MA's), (33, 16103), (48, 16178), (54, 16217), (60, 16262), (74, 16349), (79, 16370), (81, 16388), (83, 16394), (90, 16436), (127, 16631), (149, 16733), (163, 16805), (174, 16862),

Gene: MrPhizzler\_17 Start: 14411, Stop: 15211, Start Num: 25

Candidate Starts for MrPhizzler\_17:

(Start: 25 @14411 has 282 MA's), (41, 14474), (52, 14531), (53, 14540), (54, 14543), (68, 14639), (74, 14675), (97, 14792), (120, 14924), (123, 14939), (127, 14960), (130, 14990), (149, 15059), (157, 15110), (163, 15131), (173, 15185), (174, 15188),

Gene: Mudslide\_18 Start: 16685, Stop: 17491, Start Num: 24

Candidate Starts for Mudslide\_18:

(Start: 24 @16685 has 21 MA's), (41, 16748), (53, 16814), (54, 16817), (57, 16835), (71, 16928), (74, 16949), (79, 16970), (93, 17048), (104, 17105), (120, 17198), (144, 17300), (149, 17333), (152, 17345), (153, 17348), (157, 17384),

Gene: Mulan\_17 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for Mulan\_17:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Murdoc\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Murdoc\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157,

15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Mutante\_17 Start: 14409, Stop: 15209, Start Num: 25

Candidate Starts for Mutante\_17:

(Start: 25 @14409 has 282 MA's), (41, 14472), (52, 14529), (53, 14538), (54, 14541), (68, 14637), (74, 14673), (97, 14790), (120, 14922), (123, 14937), (127, 14958), (130, 14988), (149, 15057), (157, 15108), (163, 15129), (173, 15183), (174, 15186),

Gene: Mutzi\_24 Start: 15524, Stop: 16207, Start Num: 21

Candidate Starts for Mutzi\_24:

(Start: 21 @15524 has 179 MA's), (75, 15797), (98, 15917), (130, 16073), (139, 16100), (148, 16145), (149, 16148), (153, 16163),

Gene: Mysterious\_21 Start: 16746, Stop: 17582, Start Num: 13

Candidate Starts for Mysterious\_21:

(Start: 13 @16746 has 9 MA's), (Start: 27 @16779 has 11 MA's), (50, 16887), (53, 16908), (54, 16911), (57, 16929), (61, 16962), (74, 17043), (93, 17142), (127, 17328), (130, 17358), (141, 17385), (149, 17427),

Gene: NHagos\_18 Start: 14592, Stop: 15401, Start Num: 25

Candidate Starts for NHagos\_18:

(Start: 25 @14592 has 282 MA's), (33, 14610), (48, 14685), (50, 14700), (53, 14721), (54, 14724), (60, 14769), (79, 14877), (81, 14895), (120, 15102), (127, 15138), (149, 15240), (163, 15312), (174, 15369),

Gene: Nacho\_0018 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Nacho\_0018:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Namago\_28 Start: 16824, Stop: 17771, Start Num: 21

Candidate Starts for Namago\_28:

(Start: 21 @16824 has 179 MA's), (33, 16848), (42, 16896), (51, 16944), (130, 17391), (131, 17394), (157, 17511), (180, 17616), (187, 17691),

Gene: Nanao\_17 Start: 15372, Stop: 16178, Start Num: 24

Candidate Starts for Nanao\_17:

(Start: 24 @15372 has 21 MA's), (41, 15435), (53, 15501), (54, 15504), (57, 15522), (71, 15615), (74, 15636), (79, 15657), (104, 15792), (120, 15885), (130, 15951), (143, 15984), (144, 15987), (149, 16020), (157, 16071), (163, 16092), (174, 16149),

Gene: Nangang\_20 Start: 16468, Stop: 17304, Start Num: 13

Candidate Starts for Nangang\_20:

(Start: 13 @16468 has 9 MA's), (Start: 27 @16501 has 11 MA's), (50, 16609), (53, 16630), (54, 16633), (57, 16651), (74, 16765), (122, 17023), (127, 17050), (141, 17107), (149, 17149),

Gene: Natkenzie\_24 Start: 18964, Stop: 19614, Start Num: 36

Candidate Starts for Natkenzie\_24:

(6, 18841), (8, 18868), (Start: 20 @18925 has 16 MA's), (36, 18964), (39, 18979), (50, 19039), (93, 19294), (151, 19561), (156, 19597),

Gene: Nehemiah\_19 Start: 16746, Stop: 17582, Start Num: 13

Candidate Starts for Nehemiah\_19:

(Start: 13 @16746 has 9 MA's), (Start: 27 @16779 has 11 MA's), (50, 16887), (53, 16908), (54, 16911), (57, 16929), (61, 16962), (74, 17043), (93, 17142), (127, 17328), (130, 17358), (141, 17385), (149, 17427),

Gene: Newman\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Newman\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Nicole21\_18 Start: 14691, Stop: 15491, Start Num: 25

Candidate Starts for Nicole21\_18:

(Start: 25 @14691 has 282 MA's), (41, 14754), (52, 14811), (53, 14820), (54, 14823), (68, 14919), (74, 14955), (97, 15072), (120, 15204), (123, 15219), (127, 15240), (130, 15270), (149, 15339), (157, 15390), (163, 15411), (173, 15465), (174, 15468),

Gene: Nicole72\_25 Start: 18875, Stop: 19567, Start Num: 21

Candidate Starts for Nicole72\_25:

(Start: 21 @18875 has 179 MA's), (41, 18944), (50, 18986), (61, 19061), (68, 19106), (71, 19121), (82, 19181), (108, 19295), (119, 19340), (123, 19370), (130, 19424), (133, 19430), (149, 19499), (153, 19514),

Gene: Nigel\_16 Start: 15288, Stop: 16094, Start Num: 25

Candidate Starts for Nigel\_16:

(9, 15228), (Start: 25 @15288 has 282 MA's), (41, 15351), (53, 15417), (54, 15420), (57, 15438), (71, 15531), (74, 15552), (79, 15573), (104, 15708), (120, 15801), (144, 15903), (149, 15936), (152, 15948), (153, 15951), (157, 15987), (163, 16008),

Gene: Nike\_28 Start: 17776, Stop: 18723, Start Num: 21

Candidate Starts for Nike\_28:

(Start: 21 @17776 has 179 MA's), (33, 17800), (42, 17848), (51, 17896), (71, 18025), (130, 18343), (131, 18346), (157, 18463), (180, 18568),

Gene: NoodlelyBoi\_30 Start: 17634, Stop: 18314, Start Num: 21

Candidate Starts for NoodlelyBoi\_30:

(Start: 21 @17634 has 179 MA's), (45, 17721), (50, 17745), (61, 17820), (64, 17832), (71, 17880), (82, 17940), (115, 18081), (123, 18129), (130, 18183), (149, 18243),

Gene: Nordenberg\_18 Start: 16979, Stop: 17674, Start Num: 21

Candidate Starts for Nordenberg\_18:

(Start: 21 @16979 has 179 MA's), (30, 16988), (36, 17018), (52, 17105), (64, 17180), (83, 17294), (93, 17351), (95, 17363), (103, 17384), (131, 17537), (156, 17654), (160, 17669),

Gene: Nubi\_22 Start: 15176, Stop: 15862, Start Num: 21

Candidate Starts for Nubi\_22:

(Start: 21 @15176 has 179 MA's), (48, 15275), (74, 15446), (75, 15449), (98, 15569), (148, 15797), (149, 15800),

Gene: Numberten\_18 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for Numberten\_18:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157,

15401), (163, 15422), (173, 15476), (174, 15479),

Gene: Nyala\_17 Start: 14401, Stop: 15201, Start Num: 25

Candidate Starts for Nyala\_17:

(Start: 25 @14401 has 282 MA's), (41, 14464), (52, 14521), (53, 14530), (54, 14533), (68, 14629), (74, 14665), (97, 14782), (120, 14914), (123, 14929), (127, 14950), (130, 14980), (149, 15049), (157, 15100), (163, 15121), (173, 15175), (174, 15178),

Gene: NyleyClemson\_25 Start: 15932, Stop: 16852, Start Num: 16

Candidate Starts for NyleyClemson\_25:

(Start: 16 @15932 has 12 MA's), (46, 16031), (48, 16037), (49, 16049), (52, 16064), (71, 16187), (79, 16229), (89, 16292), (111, 16388), (116, 16403), (125, 16454), (150, 16568), (151, 16574), (154, 16592), (156, 16610), (169, 16676), (186, 16772),

Gene: OSmaximus\_18 Start: 14709, Stop: 15509, Start Num: 25

Candidate Starts for OSmaximus\_18:

(Start: 25 @14709 has 282 MA's), (41, 14772), (52, 14829), (53, 14838), (54, 14841), (68, 14937), (74, 14973), (97, 15090), (120, 15222), (123, 15237), (127, 15258), (130, 15288), (149, 15357), (157, 15408), (163, 15429), (173, 15483), (174, 15486),

Gene: Odyssey395\_31 Start: 17447, Stop: 18367, Start Num: 16

Candidate Starts for Odyssey395\_31:

(Start: 16 @17447 has 12 MA's), (46, 17546), (48, 17552), (49, 17564), (52, 17579), (71, 17702), (79, 17744), (89, 17807), (111, 17903), (116, 17918), (125, 17969), (150, 18083), (151, 18089), (154, 18107), (156, 18125), (169, 18191), (186, 18287),

Gene: Olak\_17 Start: 14398, Stop: 15198, Start Num: 25

Candidate Starts for Olak\_17:

(Start: 25 @14398 has 282 MA's), (41, 14461), (52, 14518), (53, 14527), (54, 14530), (68, 14626), (74, 14662), (97, 14779), (120, 14911), (123, 14926), (127, 14947), (130, 14977), (149, 15046), (157, 15097), (163, 15118), (173, 15172), (174, 15175),

Gene: Oline\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Oline\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Olive\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for Olive\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: OliverWalter\_18 Start: 14707, Stop: 15507, Start Num: 25

Candidate Starts for OliverWalter\_18:

(Start: 25 @14707 has 282 MA's), (41, 14770), (52, 14827), (53, 14836), (54, 14839), (68, 14935), (74, 14971), (97, 15088), (120, 15220), (123, 15235), (127, 15256), (130, 15286), (149, 15355), (157, 15406), (163, 15427), (173, 15481), (174, 15484),

Gene: Omniscient\_18 Start: 14708, Stop: 15508, Start Num: 25

Candidate Starts for Omniscient\_18:

(Start: 25 @14708 has 282 MA's), (41, 14771), (52, 14828), (53, 14837), (54, 14840), (68, 14936), (74, 14972), (97, 15089), (120, 15221), (123, 15236), (127, 15257), (130, 15287), (149, 15356), (157, 15407), (163, 15428), (173, 15482), (174, 15485),

Gene: OneinaGillian\_27 Start: 15783, Stop: 16724, Start Num: 21

Candidate Starts for OneinaGillian\_27:

(Start: 21 @15783 has 179 MA's), (37, 15828), (87, 16122), (123, 16293), (130, 16347), (131, 16350), (153, 16428), (166, 16497), (167, 16503), (168, 16518), (188, 16662),

Gene: Onika\_29 Start: 17281, Stop: 17961, Start Num: 21

Candidate Starts for Onika\_29:

(Start: 21 @17281 has 179 MA's), (45, 17368), (50, 17392), (61, 17467), (64, 17479), (71, 17527), (82, 17587), (111, 17716), (115, 17728), (123, 17776), (130, 17830), (149, 17890), (162, 17950),

Gene: Oosterbaan\_18 Start: 14700, Stop: 15500, Start Num: 25

Candidate Starts for Oosterbaan\_18:

(Start: 25 @14700 has 282 MA's), (41, 14763), (52, 14820), (53, 14829), (54, 14832), (68, 14928), (74, 14964), (97, 15081), (120, 15213), (123, 15228), (127, 15249), (130, 15279), (149, 15348), (157, 15399), (163, 15420), (173, 15474), (174, 15477),

Gene: Orfeu\_17 Start: 14399, Stop: 15199, Start Num: 25

Candidate Starts for Orfeu\_17:

(Start: 25 @14399 has 282 MA's), (41, 14462), (52, 14519), (53, 14528), (54, 14531), (68, 14627), (74, 14663), (97, 14780), (120, 14912), (123, 14927), (127, 14948), (130, 14978), (149, 15047), (157, 15098), (163, 15119), (173, 15173), (174, 15176),

Gene: Orion\_18 Start: 14700, Stop: 15500, Start Num: 25

Candidate Starts for Orion\_18:

(Start: 25 @14700 has 282 MA's), (41, 14763), (52, 14820), (53, 14829), (54, 14832), (68, 14928), (74, 14964), (97, 15081), (120, 15213), (123, 15228), (127, 15249), (130, 15279), (149, 15348), (157, 15399), (163, 15420), (173, 15474), (174, 15477),

Gene: Orwigg\_18 Start: 14392, Stop: 15192, Start Num: 25

Candidate Starts for Orwigg\_18:

(Start: 25 @14392 has 282 MA's), (41, 14455), (52, 14512), (53, 14521), (54, 14524), (68, 14620), (74, 14656), (97, 14773), (120, 14905), (123, 14920), (127, 14941), (130, 14971), (149, 15040), (157, 15091), (163, 15112), (173, 15166), (174, 15169),

Gene: PG1\_18 Start: 14712, Stop: 15512, Start Num: 25

Candidate Starts for PG1\_18:

(Start: 25 @14712 has 282 MA's), (41, 14775), (52, 14832), (53, 14841), (54, 14844), (68, 14940), (74, 14976), (97, 15093), (120, 15225), (123, 15240), (127, 15261), (130, 15291), (149, 15360), (157, 15411), (163, 15432), (173, 15486), (174, 15489),

Gene: Pacifista\_17 Start: 14403, Stop: 15203, Start Num: 25

Candidate Starts for Pacifista\_17:

(Start: 25 @14403 has 282 MA's), (41, 14466), (52, 14523), (53, 14532), (54, 14535), (68, 14631), (74, 14667), (97, 14784), (120, 14916), (123, 14931), (127, 14952), (130, 14982), (149, 15051), (157, 15102), (163, 15123), (173, 15177), (174, 15180),

Gene: Paries\_24 Start: 18356, Stop: 19051, Start Num: 21

Candidate Starts for Paries\_24:

(Start: 21 @18356 has 179 MA's), (30, 18365), (36, 18395), (52, 18482), (64, 18557), (83, 18671), (93, 18728), (95, 18740), (103, 18761), (131, 18914), (156, 19031), (160, 19046),

Gene: Paschalis\_29 Start: 17295, Stop: 17975, Start Num: 21

Candidate Starts for Paschalis\_29:

(Start: 21 @17295 has 179 MA's), (45, 17382), (50, 17406), (61, 17481), (64, 17493), (71, 17541), (82, 17601), (111, 17730), (115, 17742), (123, 17790), (130, 17844), (149, 17904),

Gene: Patbob\_84 Start: 51385, Stop: 52041, Start Num: 21

Candidate Starts for Patbob\_84:

(Start: 21 @51385 has 179 MA's), (60, 51568), (74, 51655), (113, 51835), (120, 51871), (121, 51874),

Gene: PenguinLover67\_21 Start: 17669, Stop: 18469, Start Num: 27

Candidate Starts for PenguinLover67\_21:

(Start: 27 @17669 has 11 MA's), (41, 17735), (47, 17762), (54, 17804), (72, 17927), (73, 17930), (74, 17936), (82, 17978), (104, 18092), (115, 18155), (120, 18185), (130, 18251), (141, 18278), (143, 18284), (149, 18320), (157, 18365), (174, 18443),

Gene: Pepe25\_26 Start: 16117, Stop: 17058, Start Num: 21

Candidate Starts for Pepe25\_26:

(Start: 21 @16117 has 179 MA's), (37, 16162), (48, 16216), (87, 16456), (131, 16684), (153, 16762), (157, 16798), (168, 16852), (188, 16996),

Gene: Phabia\_28 Start: 17159, Stop: 18106, Start Num: 21

Candidate Starts for Phabia\_28:

(Start: 21 @17159 has 179 MA's), (33, 17183), (42, 17231), (51, 17279), (131, 17729), (157, 17846), (180, 17951), (187, 18026),

Gene: Phamished\_18 Start: 14705, Stop: 15505, Start Num: 25

Candidate Starts for Phamished\_18:

(Start: 25 @14705 has 282 MA's), (41, 14768), (52, 14825), (53, 14834), (54, 14837), (68, 14933), (74, 14969), (97, 15086), (120, 15218), (123, 15233), (127, 15254), (130, 15284), (149, 15353), (157, 15404), (163, 15425), (173, 15479), (174, 15482),

Gene: Phareon\_18 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for Phareon\_18:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (174, 15183),

Gene: PhatCats2014\_18 Start: 14715, Stop: 15515, Start Num: 25

Candidate Starts for PhatCats2014\_18:

(Start: 25 @14715 has 282 MA's), (41, 14778), (52, 14835), (53, 14844), (54, 14847), (68, 14943), (74, 14979), (97, 15096), (120, 15228), (123, 15243), (127, 15264), (130, 15294), (149, 15363), (157, 15414), (163, 15435), (173, 15489), (174, 15492),

Gene: PhatLouie\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for PhatLouie\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (173, 15473), (174, 15476),

Gene: Phauci\_17 Start: 15379, Stop: 16065, Start Num: 21

Candidate Starts for Phauci\_17:

(Start: 21 @15379 has 179 MA's), (36, 15418), (52, 15505), (71, 15628), (75, 15652), (83, 15694), (93, 15748), (103, 15781), (132, 15937), (151, 16015), (153, 16021),

Gene: Phelemich\_20 Start: 16751, Stop: 17587, Start Num: 13

Candidate Starts for Phelemich\_20:

(2, 16640), (Start: 13 @16751 has 9 MA's), (Start: 27 @16784 has 11 MA's), (50, 16892), (53, 16913), (54, 16916), (57, 16934), (61, 16967), (74, 17048), (93, 17147), (127, 17333), (130, 17363), (141, 17390), (149, 17432), (157, 17483),

Gene: Phendrix\_76 Start: 39032, Stop: 39685, Start Num: 21

Candidate Starts for Phendrix\_76:

(Start: 21 @39032 has 179 MA's), (50, 39146), (65, 39245), (78, 39320), (113, 39488), (118, 39509), (120, 39524), (121, 39527),

Gene: PhenghisKhan\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for PhenghisKhan\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Pherdinand\_18 Start: 14703, Stop: 15503, Start Num: 25

Candidate Starts for Pherdinand\_18:

(Start: 25 @14703 has 282 MA's), (41, 14766), (52, 14823), (53, 14832), (54, 14835), (68, 14931), (74, 14967), (97, 15084), (120, 15216), (123, 15231), (127, 15252), (130, 15282), (149, 15351), (157, 15402), (163, 15423), (173, 15477), (174, 15480),

Gene: Phergie\_17 Start: 14252, Stop: 15052, Start Num: 25

Candidate Starts for Phergie\_17:

(Start: 25 @14252 has 282 MA's), (41, 14315), (52, 14372), (53, 14381), (54, 14384), (68, 14480), (74, 14516), (97, 14633), (120, 14765), (123, 14780), (127, 14801), (130, 14831), (149, 14900), (157, 14951), (163, 14972), (173, 15026), (174, 15029),

Gene: Phinally\_24 Start: 18791, Stop: 19477, Start Num: 21

Candidate Starts for Phinally\_24:

(Start: 21 @18791 has 179 MA's), (36, 18830), (41, 18860), (52, 18917), (74, 19061), (83, 19106), (93, 19160), (103, 19193), (132, 19349), (151, 19427), (153, 19433),

Gene: Phinky\_34 Start: 17968, Stop: 18915, Start Num: 21

Candidate Starts for Phinky\_34:

(Start: 21 @17968 has 179 MA's), (33, 17992), (51, 18088), (93, 18340), (130, 18535), (131, 18538), (149, 18604), (157, 18655), (180, 18760), (188, 18853),

Gene: Phipps\_18 Start: 14678, Stop: 15478, Start Num: 25

Candidate Starts for Phipps\_18:

(Start: 25 @14678 has 282 MA's), (41, 14741), (52, 14798), (53, 14807), (54, 14810), (68, 14906), (74, 14942), (97, 15059), (120, 15191), (123, 15206), (127, 15227), (130, 15257), (149, 15326), (157, 15377), (163, 15398), (173, 15452), (174, 15455),

Gene: Phleuron\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Phleuron\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157,

14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Phlop\_22 Start: 15240, Stop: 15926, Start Num: 21

Candidate Starts for Phlop\_22:

(Start: 21 @15240 has 179 MA's), (52, 15366), (75, 15513), (98, 15633), (130, 15789), (139, 15816), (148, 15861), (149, 15864),

Gene: Phorgeous\_29 Start: 17148, Stop: 17828, Start Num: 21

Candidate Starts for Phorgeous\_29:

(Start: 21 @17148 has 179 MA's), (45, 17235), (50, 17259), (61, 17334), (64, 17346), (71, 17394), (82, 17454), (111, 17583), (115, 17595), (123, 17643), (130, 17697), (149, 17757), (162, 17817),

Gene: Phrampa\_77 Start: 48087, Stop: 48746, Start Num: 21

Candidate Starts for Phrampa\_77:

(Start: 21 @48087 has 179 MA's), (60, 48270), (74, 48357), (113, 48540), (120, 48576), (121, 48579),

Gene: Phrancesco\_30 Start: 17426, Stop: 18106, Start Num: 21

Candidate Starts for Phrancesco\_30:

(Start: 21 @17426 has 179 MA's), (45, 17513), (50, 17537), (61, 17612), (64, 17624), (71, 17672), (82, 17732), (111, 17861), (115, 17873), (123, 17921), (130, 17975), (149, 18035), (162, 18095),

Gene: PhrankReynolds\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for PhrankReynolds\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: PhrodoBaggins\_17 Start: 14693, Stop: 15493, Start Num: 25

Candidate Starts for PhrodoBaggins\_17:

(Start: 25 @14693 has 282 MA's), (41, 14756), (52, 14813), (53, 14822), (54, 14825), (68, 14921), (74, 14957), (97, 15074), (120, 15206), (123, 15221), (127, 15242), (130, 15272), (149, 15341), (157, 15392), (163, 15413), (173, 15467), (174, 15470),

Gene: Phunky\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Phunky\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: PierreOrion\_30 Start: 17450, Stop: 18130, Start Num: 21

Candidate Starts for PierreOrion\_30:

(Start: 21 @17450 has 179 MA's), (45, 17537), (50, 17561), (61, 17636), (64, 17648), (71, 17696), (82, 17756), (111, 17885), (115, 17897), (123, 17945), (130, 17999), (149, 18059),

Gene: Piglet\_0017 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for Piglet\_0017:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),

Gene: Pine5\_20 Start: 15594, Stop: 16400, Start Num: 25

Candidate Starts for Pine5\_20:



(Start: 25 @15594 has 282 MA's), (50, 15702), (52, 15714), (53, 15723), (54, 15726), (71, 15837), (74, 15858),

Gene: PinheadLarry\_18 Start: 14418, Stop: 15218, Start Num: 25

Candidate Starts for PinheadLarry\_18:

(Start: 25 @14418 has 282 MA's), (41, 14481), (52, 14538), (53, 14547), (54, 14550), (68, 14646), (74, 14682), (97, 14799), (120, 14931), (123, 14946), (127, 14967), (130, 14997), (149, 15066), (157, 15117), (163, 15138), (173, 15192), (174, 15195),

Gene: PinkCoffee\_24 Start: 15833, Stop: 16519, Start Num: 21

Candidate Starts for PinkCoffee\_24:

(Start: 21 @15833 has 179 MA's), (48, 15932), (74, 16103), (75, 16106), (98, 16226), (148, 16454), (149, 16457),

Gene: Pinkman\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for Pinkman\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (173, 15032), (174, 15035),

Gene: PiperSansNom\_30 Start: 17602, Stop: 18282, Start Num: 21

Candidate Starts for PiperSansNom\_30:

(Start: 21 @17602 has 179 MA's), (45, 17689), (50, 17713), (61, 17788), (64, 17800), (71, 17848), (82, 17908), (111, 18037), (115, 18049), (123, 18097), (130, 18151), (149, 18211),

Gene: Piperis\_30 Start: 17272, Stop: 17952, Start Num: 21

Candidate Starts for Piperis\_30:

(Start: 21 @17272 has 179 MA's), (45, 17359), (50, 17383), (61, 17458), (64, 17470), (71, 17518), (82, 17578), (111, 17707), (115, 17719), (123, 17767), (130, 17821), (149, 17881),

Gene: Pipsqueak\_18 Start: 14705, Stop: 15505, Start Num: 25

Candidate Starts for Pipsqueak\_18:

(Start: 25 @14705 has 282 MA's), (41, 14768), (52, 14825), (53, 14834), (54, 14837), (68, 14933), (74, 14969), (97, 15086), (120, 15218), (123, 15233), (127, 15254), (130, 15284), (149, 15353), (157, 15404), (163, 15425), (173, 15479), (174, 15482),

Gene: Placalicious\_17 Start: 14400, Stop: 15200, Start Num: 25

Candidate Starts for Placalicious\_17:

(Start: 25 @14400 has 282 MA's), (41, 14463), (52, 14520), (53, 14529), (54, 14532), (68, 14628), (74, 14664), (97, 14781), (120, 14913), (123, 14928), (127, 14949), (130, 14979), (149, 15048), (157, 15099), (163, 15120), (173, 15174), (174, 15177),

Gene: Plmatters\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Plmatters\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Podrick\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for Podrick\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: Pointis\_29 Start: 17451, Stop: 18371, Start Num: 16

Candidate Starts for Pointis\_29:

(Start: 16 @17451 has 12 MA's), (46, 17550), (48, 17556), (49, 17568), (52, 17583), (71, 17706), (79, 17748), (89, 17811), (111, 17907), (116, 17922), (125, 17973), (150, 18087), (151, 18093), (154, 18111), (156, 18129), (169, 18195), (186, 18291),

Gene: Pops\_18 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for Pops\_18:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),

Gene: Portcullis\_22 Start: 15183, Stop: 15869, Start Num: 21

Candidate Starts for Portcullis\_22:

(Start: 21 @15183 has 179 MA's), (52, 15309), (75, 15456), (98, 15576), (130, 15732), (139, 15759), (148, 15804), (149, 15807),

Gene: Poster\_17 Start: 15373, Stop: 16179, Start Num: 24

Candidate Starts for Poster\_17:

(Start: 24 @15373 has 21 MA's), (41, 15436), (53, 15502), (54, 15505), (57, 15523), (71, 15616), (74, 15637), (79, 15658), (104, 15793), (120, 15886), (130, 15952), (143, 15985), (144, 15988), (149, 16021), (157, 16072), (163, 16093), (174, 16150),

Gene: Potter\_17 Start: 14413, Stop: 15213, Start Num: 25

Candidate Starts for Potter\_17:

(Start: 25 @14413 has 282 MA's), (41, 14476), (52, 14533), (53, 14542), (54, 14545), (68, 14641), (74, 14677), (97, 14794), (120, 14926), (123, 14941), (127, 14962), (130, 14992), (149, 15061), (157, 15112), (163, 15133), (173, 15187), (174, 15190),

Gene: Prickles\_18 Start: 14693, Stop: 15493, Start Num: 25

Candidate Starts for Prickles\_18:

(Start: 25 @14693 has 282 MA's), (41, 14756), (52, 14813), (53, 14822), (54, 14825), (68, 14921), (74, 14957), (97, 15074), (120, 15206), (123, 15221), (127, 15242), (130, 15272), (149, 15341), (157, 15392), (163, 15413), (173, 15467), (174, 15470),

Gene: Prince\_18 Start: 16597, Stop: 17403, Start Num: 24

Candidate Starts for Prince\_18:

(Start: 24 @16597 has 21 MA's), (41, 16660), (53, 16726), (54, 16729), (57, 16747), (71, 16840), (74, 16861), (79, 16882), (93, 16960), (104, 17017), (120, 17110), (144, 17212), (149, 17245), (152, 17257), (153, 17260), (157, 17296),

Gene: ProfessorX\_18 Start: 14691, Stop: 15491, Start Num: 25

Candidate Starts for ProfessorX\_18:

(Start: 25 @14691 has 282 MA's), (41, 14754), (52, 14811), (53, 14820), (54, 14823), (68, 14919), (74, 14955), (97, 15072), (120, 15204), (123, 15219), (127, 15240), (130, 15270), (149, 15339), (157, 15390), (163, 15411), (173, 15465), (174, 15468),

Gene: Puhltonio\_18 Start: 14708, Stop: 15508, Start Num: 25

Candidate Starts for Puhltonio\_18:

(Start: 25 @14708 has 282 MA's), (41, 14771), (52, 14828), (53, 14837), (54, 14840), (68, 14936), (74, 14972), (97, 15089), (120, 15221), (123, 15236), (127, 15257), (130, 15287), (149, 15356), (157, 15407), (163, 15428), (173, 15482), (174, 15485),

Gene: Pulchra\_31 Start: 17672, Stop: 18352, Start Num: 21

Candidate Starts for Pulchra\_31:

(Start: 21 @17672 has 179 MA's), (45, 17759), (50, 17783), (61, 17858), (64, 17870), (71, 17918), (82, 17978), (111, 18107), (115, 18119), (123, 18167), (130, 18221), (149, 18281),

Gene: PullumCavea\_22 Start: 15240, Stop: 15926, Start Num: 21

Candidate Starts for PullumCavea\_22:

(Start: 21 @15240 has 179 MA's), (52, 15366), (75, 15513), (98, 15633), (130, 15789), (139, 15816), (148, 15861), (149, 15864),

Gene: Pureglobe5\_31 Start: 17461, Stop: 18381, Start Num: 16

Candidate Starts for Pureglobe5\_31:

(Start: 16 @17461 has 12 MA's), (46, 17560), (48, 17566), (49, 17578), (52, 17593), (71, 17716), (79, 17758), (89, 17821), (111, 17917), (116, 17932), (125, 17983), (150, 18097), (151, 18103), (154, 18121), (156, 18139), (169, 18205), (186, 18301),

Gene: Quammi\_26 Start: 16730, Stop: 17677, Start Num: 21

Candidate Starts for Quammi\_26:

(Start: 21 @16730 has 179 MA's), (33, 16754), (42, 16802), (51, 16850), (131, 17300), (157, 17417), (180, 17522), (187, 17597),

Gene: QueenBeane\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for QueenBeane\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: QueenPie\_18 Start: 16971, Stop: 17777, Start Num: 24

Candidate Starts for QueenPie\_18:

(Start: 24 @16971 has 21 MA's), (41, 17034), (53, 17100), (54, 17103), (57, 17121), (71, 17214), (74, 17235), (79, 17256), (104, 17391), (120, 17484), (144, 17586), (149, 17619), (152, 17631), (153, 17634), (157, 17670),

Gene: Quesadilla\_21 Start: 17756, Stop: 18556, Start Num: 27

Candidate Starts for Quesadilla\_21:

(Start: 27 @17756 has 11 MA's), (41, 17822), (48, 17852), (54, 17891), (72, 18014), (73, 18017), (74, 18023), (82, 18065), (115, 18242), (120, 18272), (141, 18365), (149, 18407), (157, 18452), (174, 18530),

Gene: Quhwah\_33 Start: 17898, Stop: 18578, Start Num: 21

Candidate Starts for Quhwah\_33:

(Start: 21 @17898 has 179 MA's), (45, 17985), (50, 18009), (61, 18084), (64, 18096), (71, 18144), (82, 18204), (111, 18333), (115, 18345), (123, 18393), (130, 18447), (149, 18507),

Gene: Quisquiliae\_18 Start: 14714, Stop: 15514, Start Num: 25

Candidate Starts for Quisquiliae\_18:

(Start: 25 @14714 has 282 MA's), (41, 14777), (52, 14834), (53, 14843), (54, 14846), (68, 14942), (74, 14978), (97, 15095), (120, 15227), (123, 15242), (127, 15263), (130, 15293), (149, 15362), (157, 15413), (163, 15434), (173, 15488), (174, 15491),

Gene: Racecar\_84 Start: 51166, Stop: 51822, Start Num: 21

Candidate Starts for Racecar\_84:

(Start: 21 @51166 has 179 MA's), (60, 51349), (74, 51436), (113, 51616), (120, 51652), (121, 51655),

Gene: RainyPolka\_17 Start: 17299, Stop: 17994, Start Num: 22

Candidate Starts for RainyPolka\_17:

(Start: 22 @17299 has 12 MA's), (35, 17329), (39, 17347), (48, 17389), (49, 17401), (52, 17416), (54, 17428), (55, 17434), (62, 17482), (74, 17560), (82, 17602), (83, 17605), (96, 17671), (111, 17731), (121, 17776), (124, 17791), (139, 17872), (143, 17884), (149, 17920), (151, 17929),

Gene: Ramiel05\_29 Start: 17307, Stop: 17987, Start Num: 21

Candidate Starts for Ramiel05\_29:

(Start: 21 @17307 has 179 MA's), (45, 17394), (50, 17418), (61, 17493), (64, 17505), (71, 17553), (82, 17613), (111, 17742), (115, 17754), (123, 17802), (130, 17856), (149, 17916),

Gene: Ranunculus\_23 Start: 16352, Stop: 17272, Start Num: 16

Candidate Starts for Ranunculus\_23:

(Start: 16 @16352 has 12 MA's), (36, 16397), (40, 16421), (49, 16469), (52, 16484), (79, 16649), (125, 16874), (150, 16988), (151, 16994), (156, 17030), (169, 17096),

Gene: Rasputia\_59 Start: 32882, Stop: 33766, Start Num: 21

Candidate Starts for Rasputia\_59:

(Start: 21 @32882 has 179 MA's), (33, 32906), (48, 32978), (61, 33068), (75, 33152), (82, 33191), (111, 33323), (115, 33335), (131, 33440), (140, 33461), (167, 33596),

Gene: RawrgerThat\_18 Start: 16434, Stop: 17240, Start Num: 24

Candidate Starts for RawrgerThat\_18:

(Start: 24 @16434 has 21 MA's), (41, 16497), (53, 16563), (54, 16566), (57, 16584), (71, 16677), (74, 16698), (79, 16719), (93, 16797), (104, 16854), (120, 16947), (144, 17049), (149, 17082), (152, 17094), (153, 17097), (157, 17133),

Gene: RedMaple\_17 Start: 14711, Stop: 15511, Start Num: 25

Candidate Starts for RedMaple\_17:

(Start: 25 @14711 has 282 MA's), (41, 14774), (52, 14831), (53, 14840), (54, 14843), (68, 14939), (74, 14975), (97, 15092), (120, 15224), (123, 15239), (127, 15260), (130, 15290), (149, 15359), (157, 15410), (163, 15431), (173, 15485), (174, 15488),

Gene: Reprobate\_20 Start: 16748, Stop: 17584, Start Num: 13

Candidate Starts for Reprobate\_20:

(2, 16637), (Start: 13 @16748 has 9 MA's), (Start: 27 @16781 has 11 MA's), (50, 16889), (53, 16910), (54, 16913), (57, 16931), (61, 16964), (74, 17045), (93, 17144), (116, 17267), (127, 17330), (130, 17360), (141, 17387), (149, 17429),

Gene: Ribeye\_24 Start: 19187, Stop: 19882, Start Num: 21

Candidate Starts for Ribeye\_24:

(Start: 21 @19187 has 179 MA's), (36, 19226), (64, 19388), (66, 19415), (93, 19559), (95, 19571), (123, 19688), (131, 19745), (156, 19862),

Gene: Rich\_20 Start: 16635, Stop: 17471, Start Num: 13

Candidate Starts for Rich\_20:

(Start: 13 @16635 has 9 MA's), (Start: 27 @16668 has 11 MA's), (48, 16761), (50, 16776), (53, 16797), (54, 16800), (57, 16818), (74, 16932), (127, 17217), (130, 17247), (149, 17316), (163, 17388),

Gene: Ricotta\_17 Start: 14423, Stop: 15223, Start Num: 25

Candidate Starts for Ricotta\_17:

(Start: 25 @14423 has 282 MA's), (41, 14486), (52, 14543), (53, 14552), (54, 14555), (68, 14651), (74, 14687), (97, 14804), (120, 14936), (123, 14951), (127, 14972), (130, 15002), (149, 15071), (157, 15122), (163, 15143), (173, 15197), (174, 15200),

Gene: Riggan\_18 Start: 14679, Stop: 15479, Start Num: 25

Candidate Starts for Riggan\_18:

(Start: 25 @14679 has 282 MA's), (41, 14742), (52, 14799), (53, 14808), (54, 14811), (68, 14907), (74, 14943), (97, 15060), (120, 15192), (123, 15207), (127, 15228), (130, 15258), (149, 15327), (157, 15378), (163, 15399), (173, 15453), (174, 15456),

Gene: Rimu\_17 Start: 14411, Stop: 15211, Start Num: 25

Candidate Starts for Rimu\_17:

(Start: 25 @14411 has 282 MA's), (41, 14474), (52, 14531), (53, 14540), (54, 14543), (68, 14639), (74, 14675), (97, 14792), (120, 14924), (123, 14939), (127, 14960), (130, 14990), (149, 15059), (157, 15110), (163, 15131), (173, 15185), (174, 15188),

Gene: Rinkes\_22 Start: 18349, Stop: 19149, Start Num: 27

Candidate Starts for Rinkes\_22:

(Start: 27 @18349 has 11 MA's), (41, 18415), (43, 18421), (50, 18460), (54, 18484), (71, 18595), (74, 18616), (92, 18709), (115, 18835), (120, 18865), (131, 18934), (146, 18976), (149, 19000), (153, 19015), (163, 19066), (174, 19123),

Gene: RiverRaider\_24 Start: 17572, Stop: 18267, Start Num: 21

Candidate Starts for RiverRaider\_24:

(8, 17515), (Start: 21 @17572 has 179 MA's), (30, 17581), (36, 17611), (48, 17671), (52, 17698), (64, 17773), (93, 17944), (95, 17956), (131, 18130), (153, 18217), (160, 18262),

Gene: Rizwana\_22 Start: 16262, Stop: 17188, Start Num: 16

Candidate Starts for Rizwana\_22:

(Start: 16 @16262 has 12 MA's), (36, 16310), (71, 16520), (79, 16562), (83, 16586), (125, 16787), (155, 16928), (156, 16943), (175, 17030), (182, 17069), (190, 17159),

Gene: RoadKill\_21 Start: 16669, Stop: 17364, Start Num: 20

Candidate Starts for RoadKill\_21:

(Start: 20 @16669 has 16 MA's), (30, 16678), (36, 16708), (48, 16768), (50, 16783), (52, 16795), (74, 16939), (93, 17038), (95, 17050), (117, 17134), (130, 17221), (151, 17305),

Gene: RobinRose\_29 Start: 16284, Stop: 17225, Start Num: 21

Candidate Starts for RobinRose\_29:

(Start: 21 @16284 has 179 MA's), (37, 16329), (87, 16623), (123, 16794), (130, 16848), (131, 16851), (153, 16929), (166, 16998), (167, 17004), (168, 17019), (188, 17163),

Gene: RobsFeet\_31 Start: 17385, Stop: 18065, Start Num: 21

Candidate Starts for RobsFeet\_31:

(Start: 21 @17385 has 179 MA's), (45, 17472), (60, 17565), (61, 17571), (64, 17583), (71, 17631), (82, 17691), (108, 17805), (123, 17880), (130, 17934), (149, 17994), (162, 18054),

Gene: Robyn\_17 Start: 14272, Stop: 15072, Start Num: 25

Candidate Starts for Robyn\_17:

(Start: 25 @14272 has 282 MA's), (41, 14335), (52, 14392), (53, 14401), (54, 14404), (68, 14500), (74, 14536), (97, 14653), (120, 14785), (123, 14800), (127, 14821), (130, 14851), (149, 14920), (157, 14971), (163, 14992), (173, 15046), (174, 15049),

Gene: Rofo\_23 Start: 18608, Stop: 19303, Start Num: 21

Candidate Starts for Rofo\_23:

(Start: 21 @18608 has 179 MA's), (30, 18617), (36, 18647), (52, 18734), (64, 18809), (93, 18980), (95, 18992), (103, 19013), (131, 19166), (139, 19190), (156, 19283), (160, 19298),

Gene: RogerDodger\_25 Start: 16033, Stop: 16719, Start Num: 21

Candidate Starts for RogerDodger\_25:

(Start: 21 @16033 has 179 MA's), (48, 16132), (74, 16303), (75, 16306), (98, 16426), (149, 16657),

Gene: Roliet\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Roliet\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: RomansRevenge\_19 Start: 14509, Stop: 15429, Start Num: 16

Candidate Starts for RomansRevenge\_19:

(Start: 16 @14509 has 12 MA's), (32, 14533), (89, 14866), (103, 14914), (125, 15028), (130, 15073), (146, 15115), (149, 15139), (150, 15142), (154, 15166), (157, 15190), (171, 15253), (180, 15283), (186, 15343),

Gene: Romm\_29 Start: 16284, Stop: 17225, Start Num: 21

Candidate Starts for Romm\_29:

(Start: 21 @16284 has 179 MA's), (37, 16329), (87, 16623), (123, 16794), (130, 16848), (131, 16851), (153, 16929), (166, 16998), (167, 17004), (168, 17019), (188, 17163),

Gene: Roscoe\_19 Start: 14940, Stop: 15740, Start Num: 25

Candidate Starts for Roscoe\_19:

(Start: 25 @14940 has 282 MA's), (41, 15003), (52, 15060), (53, 15069), (54, 15072), (68, 15168), (74, 15204), (97, 15321), (120, 15453), (123, 15468), (127, 15489), (130, 15519), (149, 15588), (157, 15639), (163, 15660), (173, 15714), (174, 15717),

Gene: Rowlf\_24 Start: 16422, Stop: 17369, Start Num: 21

Candidate Starts for Rowlf\_24:

(Start: 21 @16422 has 179 MA's), (33, 16446), (42, 16494), (51, 16542), (130, 16989), (131, 16992), (157, 17109), (180, 17214), (187, 17289),

Gene: Roy17\_18 Start: 14401, Stop: 15201, Start Num: 25

Candidate Starts for Roy17\_18:

(Start: 25 @14401 has 282 MA's), (41, 14464), (52, 14521), (53, 14530), (54, 14533), (68, 14629), (74, 14665), (97, 14782), (120, 14914), (123, 14929), (127, 14950), (130, 14980), (149, 15049), (157, 15100), (163, 15121), (173, 15175), (174, 15178),

Gene: RubyRalph\_30 Start: 16992, Stop: 17930, Start Num: 21

Candidate Starts for RubyRalph\_30:

(Start: 21 @16992 has 179 MA's), (33, 17016), (67, 17223), (71, 17241), (119, 17478), (129, 17544), (130, 17559), (149, 17628), (151, 17637), (153, 17643), (180, 17781),

Gene: Rudy\_26 Start: 16763, Stop: 17710, Start Num: 21

Candidate Starts for Rudy\_26:

(Start: 21 @16763 has 179 MA's), (33, 16787), (42, 16835), (51, 16883), (131, 17333), (157, 17450), (180, 17555), (187, 17630),

Gene: SDcharge11\_18 Start: 14680, Stop: 15480, Start Num: 25

Candidate Starts for SDcharge11\_18:

(Start: 25 @14680 has 282 MA's), (41, 14743), (52, 14800), (53, 14809), (54, 14812), (68, 14908), (74, 14944), (97, 15061), (120, 15193), (123, 15208), (127, 15229), (130, 15259), (149, 15328), (157, 15379), (163, 15400), (173, 15454), (174, 15457),

Gene: SJReid\_88 Start: 52426, Stop: 53082, Start Num: 21

Candidate Starts for SJReid\_88:

(Start: 21 @52426 has 179 MA's), (34, 52459), (83, 52750), (85, 52762), (113, 52888), (143, 53020), (145, 53026),

Gene: SadLad\_32 Start: 17935, Stop: 18873, Start Num: 21

Candidate Starts for SadLad\_32:

(Start: 21 @17935 has 179 MA's), (33, 17959), (67, 18166), (71, 18184), (119, 18421), (129, 18487), (130, 18502), (149, 18571), (151, 18580), (153, 18586), (180, 18724),

Gene: Saguaro\_20 Start: 17420, Stop: 18220, Start Num: 27

Candidate Starts for Saguaro\_20:

(Start: 27 @17420 has 11 MA's), (37, 17462), (41, 17486), (54, 17555), (61, 17606), (71, 17666), (72, 17678), (74, 17687), (79, 17708), (115, 17906), (120, 17936), (141, 18029), (147, 18065), (149, 18071),

Gene: Salete\_16 Start: 16946, Stop: 17644, Start Num: 22

Candidate Starts for Salete\_16:

(Start: 22 @16946 has 12 MA's), (35, 16976), (39, 16994), (48, 17036), (49, 17048), (52, 17063), (54, 17075), (71, 17186), (74, 17207), (83, 17252), (96, 17318), (108, 17363), (124, 17438), (130, 17486), (131, 17489), (139, 17519), (143, 17531), (149, 17567), (162, 17633),

Gene: SallyK\_29 Start: 17813, Stop: 18760, Start Num: 21

Candidate Starts for SallyK\_29:

(Start: 21 @17813 has 179 MA's), (33, 17837), (42, 17885), (51, 17933), (131, 18383), (157, 18500), (180, 18605), (187, 18680),

Gene: Salvador\_22 Start: 15154, Stop: 15840, Start Num: 21

Candidate Starts for Salvador\_22:

(Start: 21 @15154 has 179 MA's), (48, 15253), (74, 15424), (75, 15427), (98, 15547), (148, 15775), (149, 15778),

Gene: Samaymay\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Samaymay\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Sampson\_24 Start: 18870, Stop: 19559, Start Num: 20

Candidate Starts for Sampson\_24:

(6, 18786), (8, 18813), (Start: 20 @18870 has 16 MA's), (36, 18909), (39, 18924), (50, 18984), (93, 19239), (151, 19506), (156, 19542),

Gene: Sanjuju\_21 Start: 18118, Stop: 18813, Start Num: 21

Candidate Starts for Sanjuju\_21:

(Start: 21 @18118 has 179 MA's), (30, 18127), (36, 18157), (52, 18244), (64, 18319), (71, 18367), (83, 18433), (93, 18490), (95, 18502), (103, 18523), (131, 18676), (156, 18793), (160, 18808),

Gene: Saronaya\_23 Start: 18018, Stop: 18713, Start Num: 21

Candidate Starts for Saronaya\_23:

(8, 17958), (Start: 21 @18018 has 179 MA's), (36, 18057), (64, 18219), (93, 18390), (95, 18402), (156, 18693), (160, 18708),

Gene: SassyCat97\_17 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for SassyCat97\_17:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Savannah\_29 Start: 17334, Stop: 18014, Start Num: 21

Candidate Starts for Savannah\_29:

(Start: 21 @17334 has 179 MA's), (45, 17421), (50, 17445), (61, 17520), (64, 17532), (71, 17580), (82, 17640), (111, 17769), (115, 17781), (123, 17829), (130, 17883), (149, 17943),

Gene: Savbucketdawg\_22 Start: 14935, Stop: 15621, Start Num: 21

Candidate Starts for Savbucketdawg\_22:

(Start: 21 @14935 has 179 MA's), (48, 15034), (74, 15205), (75, 15208), (98, 15328), (148, 15556), (149, 15559),

Gene: Schadenfreude\_17 Start: 14256, Stop: 15056, Start Num: 25

Candidate Starts for Schadenfreude\_17:

(Start: 25 @14256 has 282 MA's), (41, 14319), (52, 14376), (53, 14385), (54, 14388), (68, 14484), (74, 14520), (97, 14637), (120, 14769), (123, 14784), (127, 14805), (130, 14835), (149, 14904), (157, 14955), (163, 14976), (173, 15030), (174, 15033),

Gene: SchottB\_22 Start: 19033, Stop: 19728, Start Num: 21

Candidate Starts for SchottB\_22:

(Start: 21 @19033 has 179 MA's), (36, 19072), (64, 19234), (66, 19261), (71, 19282), (93, 19405), (95, 19417), (131, 19591), (156, 19708), (160, 19723),

Gene: Schueller\_17 Start: 14397, Stop: 15197, Start Num: 25

Candidate Starts for Schueller\_17:

(Start: 25 @14397 has 282 MA's), (41, 14460), (52, 14517), (53, 14526), (54, 14529), (68, 14625), (74, 14661), (97, 14778), (120, 14910), (123, 14925), (127, 14946), (130, 14976), (149, 15045), (157, 15096), (163, 15117), (173, 15171), (174, 15174),

Gene: Scioto\_24 Start: 18979, Stop: 19614, Start Num: 39

Candidate Starts for Scioto\_24:

(6, 18841), (8, 18868), (Start: 20 @18925 has 16 MA's), (36, 18964), (39, 18979), (50, 19039), (93, 19294), (151, 19561), (156, 19597),

Gene: Scoot17C\_18 Start: 14700, Stop: 15500, Start Num: 25

Candidate Starts for Scoot17C\_18:

(Start: 25 @14700 has 282 MA's), (41, 14763), (52, 14820), (53, 14829), (54, 14832), (68, 14928), (74, 14964), (97, 15081), (120, 15213), (123, 15228), (127, 15249), (130, 15279), (149, 15348), (157, 15399), (163, 15420), (173, 15474), (174, 15477),

Gene: Scrick\_17 Start: 14419, Stop: 15219, Start Num: 25

Candidate Starts for Scrick\_17:



(Start: 25 @14419 has 282 MA's), (41, 14482), (52, 14539), (53, 14548), (54, 14551), (68, 14647), (74, 14683), (97, 14800), (120, 14932), (123, 14947), (127, 14968), (130, 14998), (149, 15067), (157, 15118), (163, 15139), (173, 15193), (174, 15196),

Gene: Scumberland\_31 Start: 17522, Stop: 18202, Start Num: 21

Candidate Starts for Scumberland\_31:

(Start: 21 @17522 has 179 MA's), (45, 17609), (50, 17633), (61, 17708), (64, 17720), (71, 17768), (82, 17828), (111, 17957), (115, 17969), (123, 18017), (130, 18071), (149, 18131), (162, 18191),

Gene: Sedona\_25 Start: 20423, Stop: 21118, Start Num: 21

Candidate Starts for Sedona\_25:

(Start: 21 @20423 has 179 MA's), (30, 20432), (36, 20462), (52, 20549), (64, 20624), (71, 20672), (93, 20795), (95, 20807), (103, 20828), (131, 20981), (156, 21098), (160, 21113),

Gene: Sejanus\_17 Start: 14658, Stop: 15461, Start Num: 28

Candidate Starts for Sejanus\_17:

(Start: 28 @14658 has 2 MA's), (32, 14670), (35, 14685), (37, 14694), (39, 14703), (54, 14787), (61, 14838), (79, 14940), (80, 14943), (84, 14970), (91, 15009), (93, 15018), (105, 15087), (117, 15150), (145, 15276), (154, 15330),

Gene: Selr12\_18 Start: 14424, Stop: 15224, Start Num: 25

Candidate Starts for Selr12\_18:

(Start: 25 @14424 has 282 MA's), (41, 14487), (52, 14544), (53, 14553), (54, 14556), (68, 14652), (74, 14688), (97, 14805), (120, 14937), (123, 14952), (127, 14973), (130, 15003), (149, 15072), (157, 15123), (163, 15144), (173, 15198), (174, 15201),

Gene: Selwyn23\_31 Start: 17500, Stop: 18180, Start Num: 21

Candidate Starts for Selwyn23\_31:

(Start: 21 @17500 has 179 MA's), (45, 17587), (50, 17611), (61, 17686), (64, 17698), (71, 17746), (82, 17806), (111, 17935), (115, 17947), (123, 17995), (130, 18049), (149, 18109),

Gene: Serendipitous\_20 Start: 16688, Stop: 17524, Start Num: 13

Candidate Starts for Serendipitous\_20:

(2, 16580), (Start: 13 @16688 has 9 MA's), (Start: 27 @16721 has 11 MA's), (50, 16829), (53, 16850), (54, 16853), (57, 16871), (74, 16985), (127, 17270), (130, 17300), (145, 17339), (149, 17369), (163, 17441), (165, 17447), (178, 17519),

Gene: Serendipity\_18 Start: 14720, Stop: 15520, Start Num: 25

Candidate Starts for Serendipity\_18:

(Start: 25 @14720 has 282 MA's), (41, 14783), (52, 14840), (53, 14849), (54, 14852), (68, 14948), (74, 14984), (97, 15101), (120, 15233), (123, 15248), (127, 15269), (130, 15299), (149, 15368), (157, 15419), (163, 15440), (173, 15494), (174, 15497),

Gene: Serpentine\_0018 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for Serpentine\_0018:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),

Gene: Shatter\_18 Start: 14690, Stop: 15502, Start Num: 26

Candidate Starts for Shatter\_18:

(Start: 26 @14690 has 5 MA's), (33, 14708), (48, 14783), (52, 14810), (54, 14822), (60, 14867), (74, 14954), (79, 14975), (120, 15200), (126, 15230), (127, 15236), (149, 15338), (163, 15410), (174,

15467),

Gene: Sheila\_18 Start: 14691, Stop: 15491, Start Num: 25

Candidate Starts for Sheila\_18:

(Start: 25 @14691 has 282 MA's), (41, 14754), (52, 14811), (53, 14820), (54, 14823), (68, 14919), (74, 14955), (97, 15072), (120, 15204), (123, 15219), (127, 15240), (130, 15270), (149, 15339), (157, 15390), (173, 15465), (174, 15468),

Gene: Shenyu\_20 Start: 16468, Stop: 17304, Start Num: 13

Candidate Starts for Shenyu\_20:

(Start: 13 @16468 has 9 MA's), (Start: 27 @16501 has 11 MA's), (50, 16609), (53, 16630), (54, 16633), (57, 16651), (74, 16765), (122, 17023), (127, 17050), (141, 17107), (149, 17149),

Gene: ShiVal\_18 Start: 14693, Stop: 15493, Start Num: 25

Candidate Starts for ShiVal\_18:

(Start: 25 @14693 has 282 MA's), (41, 14756), (52, 14813), (53, 14822), (54, 14825), (68, 14921), (74, 14957), (97, 15074), (120, 15206), (123, 15221), (127, 15242), (130, 15272), (149, 15341), (157, 15392), (163, 15413), (173, 15467), (174, 15470),

Gene: Shinji\_22 Start: 15124, Stop: 15810, Start Num: 21

Candidate Starts for Shinji\_22:

(Start: 21 @15124 has 179 MA's), (52, 15250), (75, 15397), (98, 15517), (130, 15673), (139, 15700), (148, 15745), (149, 15748),

Gene: Shivanishola\_23 Start: 18451, Stop: 19146, Start Num: 21

Candidate Starts for Shivanishola\_23:

(Start: 21 @18451 has 179 MA's), (30, 18460), (36, 18490), (52, 18577), (64, 18652), (83, 18766), (93, 18823), (95, 18835), (103, 18856), (131, 19009), (139, 19033), (156, 19126), (160, 19141),

Gene: Shotgun\_29 Start: 17132, Stop: 17812, Start Num: 21

Candidate Starts for Shotgun\_29:

(Start: 21 @17132 has 179 MA's), (45, 17219), (50, 17243), (61, 17318), (64, 17330), (71, 17378), (82, 17438), (111, 17567), (115, 17579), (123, 17627), (130, 17681), (149, 17741), (162, 17801),

Gene: Sigman\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for Sigman\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: SilentRX\_24 Start: 16580, Stop: 17476, Start Num: 16

Candidate Starts for SilentRX\_24:

(Start: 16 @16580 has 12 MA's), (36, 16622), (38, 16634), (46, 16676), (54, 16721), (59, 16754), (66, 16811), (81, 16892), (89, 16937), (93, 16955), (115, 17021), (119, 17039), (123, 17066), (137, 17138), (146, 17162),

Gene: Sillytadpoles\_29 Start: 16848, Stop: 17675, Start Num: 51

Candidate Starts for Sillytadpoles\_29:

(Start: 21 @16728 has 179 MA's), (33, 16752), (42, 16800), (51, 16848), (131, 17298), (157, 17415), (180, 17520), (187, 17595),

Gene: SilverBell\_18 Start: 14705, Stop: 15505, Start Num: 25

Candidate Starts for SilverBell\_18:

(Start: 25 @14705 has 282 MA's), (41, 14768), (52, 14825), (53, 14834), (54, 14837), (68, 14933), (74, 14969), (97, 15086), (120, 15218), (123, 15233), (127, 15254), (130, 15284), (149, 15353), (157, 15404), (163, 15425), (173, 15479), (174, 15482),

Gene: Simielle\_17 Start: 14391, Stop: 15191, Start Num: 25

Candidate Starts for Simielle\_17:

(Start: 25 @14391 has 282 MA's), (41, 14454), (52, 14511), (53, 14520), (54, 14523), (68, 14619), (74, 14655), (97, 14772), (120, 14904), (123, 14919), (127, 14940), (130, 14970), (149, 15039), (157, 15090), (163, 15111), (173, 15165), (174, 15168),

Gene: SirJeffery\_20 Start: 16497, Stop: 17333, Start Num: 13

Candidate Starts for SirJeffery\_20:

(Start: 13 @16497 has 9 MA's), (Start: 27 @16530 has 11 MA's), (50, 16638), (51, 16644), (53, 16659), (54, 16662), (57, 16680), (74, 16794), (127, 17079), (130, 17109), (145, 17148), (149, 17178), (163, 17250),

Gene: Sisko\_18 Start: 14990, Stop: 15799, Start Num: 25

Candidate Starts for Sisko\_18:

(7, 14921), (11, 14939), (Start: 25 @14990 has 282 MA's), (33, 15008), (48, 15083), (54, 15122), (74, 15254), (79, 15275), (90, 15341), (127, 15536), (149, 15638), (153, 15653), (163, 15710),

Gene: Sitar\_25 Start: 19794, Stop: 20489, Start Num: 21

Candidate Starts for Sitar\_25:

(Start: 21 @19794 has 179 MA's), (30, 19803), (36, 19833), (52, 19920), (64, 19995), (71, 20043), (93, 20166), (95, 20178), (103, 20199), (131, 20352), (156, 20469),

Gene: Sixama\_83 Start: 44174, Stop: 44824, Start Num: 21

Candidate Starts for Sixama\_83:

(Start: 21 @44174 has 179 MA's), (37, 44219), (42, 44246), (50, 44288), (61, 44363), (74, 44444), (113, 44627), (119, 44651), (120, 44663), (121, 44666),

Gene: Skippy\_18 Start: 14684, Stop: 15484, Start Num: 25

Candidate Starts for Skippy\_18:

(Start: 25 @14684 has 282 MA's), (41, 14747), (52, 14804), (53, 14813), (54, 14816), (68, 14912), (74, 14948), (97, 15065), (120, 15197), (123, 15212), (127, 15233), (130, 15263), (149, 15332), (157, 15383), (163, 15404), (173, 15458), (174, 15461),

Gene: Slatt\_18 Start: 14716, Stop: 15516, Start Num: 25

Candidate Starts for Slatt\_18:

(Start: 25 @14716 has 282 MA's), (41, 14779), (52, 14836), (53, 14845), (54, 14848), (68, 14944), (74, 14980), (97, 15097), (120, 15229), (123, 15244), (127, 15265), (130, 15295), (149, 15364), (157, 15415), (163, 15436), (173, 15490), (174, 15493),

Gene: Smarties\_38 Start: 19203, Stop: 19883, Start Num: 21

Candidate Starts for Smarties\_38:

(Start: 21 @19203 has 179 MA's), (42, 19275), (45, 19290), (50, 19314), (61, 19389), (64, 19401), (66, 19428), (71, 19449), (82, 19509), (111, 19638), (115, 19650), (123, 19698), (130, 19752), (149, 19812),

Gene: SmokingBunny\_22 Start: 15154, Stop: 15840, Start Num: 21

Candidate Starts for SmokingBunny\_22:

(Start: 21 @15154 has 179 MA's), (48, 15253), (74, 15424), (75, 15427), (98, 15547), (148, 15775), (149, 15778),

Gene: Soile\_18 Start: 14411, Stop: 15211, Start Num: 25

Candidate Starts for Soile\_18:

(Start: 25 @14411 has 282 MA's), (41, 14474), (52, 14531), (53, 14540), (54, 14543), (68, 14639), (74, 14675), (97, 14792), (120, 14924), (123, 14939), (127, 14960), (130, 14990), (149, 15059), (157, 15110), (163, 15131), (173, 15185), (174, 15188),

Gene: Solosis\_17 Start: 14418, Stop: 15218, Start Num: 25

Candidate Starts for Solosis\_17:

(Start: 25 @14418 has 282 MA's), (41, 14481), (52, 14538), (53, 14547), (54, 14550), (68, 14646), (74, 14682), (97, 14799), (120, 14931), (123, 14946), (127, 14967), (130, 14997), (149, 15066), (157, 15117), (163, 15138), (173, 15192), (174, 15195),

Gene: Soos\_45 Start: 26265, Stop: 27008, Start Num: 29

Candidate Starts for Soos\_45:

(Start: 29 @26265 has 3 MA's), (31, 26271), (48, 26355), (54, 26394), (61, 26445), (74, 26526), (78, 26544), (87, 26595), (88, 26601), (90, 26613), (106, 26700), (114, 26733), (126, 26802), (149, 26910),

Gene: Sophia\_17 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for Sophia\_17:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Soto\_18 Start: 14696, Stop: 15496, Start Num: 25

Candidate Starts for Soto\_18:

(Start: 25 @14696 has 282 MA's), (41, 14759), (52, 14816), (53, 14825), (54, 14828), (68, 14924), (74, 14960), (97, 15077), (120, 15209), (123, 15224), (127, 15245), (130, 15275), (149, 15344), (157, 15395), (163, 15416), (173, 15470), (174, 15473),

Gene: Sour\_21 Start: 16499, Stop: 17311, Start Num: 25

Candidate Starts for Sour\_21:

(Start: 13 @16466 has 9 MA's), (Start: 25 @16499 has 282 MA's), (48, 16592), (54, 16631), (61, 16682), (74, 16763), (79, 16784), (81, 16802), (90, 16850), (127, 17045), (149, 17147), (153, 17162), (174, 17276), (179, 17300),

Gene: Spartan300\_18 Start: 14696, Stop: 15496, Start Num: 25

Candidate Starts for Spartan300\_18:

(Start: 25 @14696 has 282 MA's), (41, 14759), (53, 14825), (54, 14828), (68, 14924), (74, 14960), (97, 15077), (120, 15209), (123, 15224), (127, 15245), (130, 15275), (149, 15344), (157, 15395), (163, 15416), (173, 15470), (174, 15473),

Gene: Squash\_30 Start: 17789, Stop: 18736, Start Num: 21

Candidate Starts for Squash\_30:

(Start: 21 @17789 has 179 MA's), (33, 17813), (42, 17861), (51, 17909), (131, 18359), (157, 18476), (180, 18581), (187, 18656),

Gene: Squid\_18 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for Squid\_18:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Squiggle\_18 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for Squiggle\_18:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Statler\_30 Start: 17647, Stop: 18594, Start Num: 21

Candidate Starts for Statler\_30:

(Start: 21 @17647 has 179 MA's), (33, 17671), (42, 17719), (51, 17767), (71, 17896), (130, 18214), (131, 18217), (157, 18334), (180, 18439), (187, 18514),

Gene: Sting\_48 Start: 26704, Stop: 27447, Start Num: 29

Candidate Starts for Sting\_48:

(Start: 29 @26704 has 3 MA's), (31, 26710), (48, 26794), (54, 26833), (61, 26884), (74, 26965), (78, 26983), (87, 27034), (88, 27040), (90, 27052), (106, 27139), (114, 27172), (126, 27241), (149, 27349),

Gene: Stinger\_16 Start: 14936, Stop: 15742, Start Num: 25

Candidate Starts for Stinger\_16:

(Start: 25 @14936 has 282 MA's), (41, 14999), (53, 15065), (54, 15068), (71, 15179), (74, 15200), (79, 15221), (104, 15356), (120, 15449), (144, 15551), (149, 15584), (152, 15596), (153, 15599), (157, 15635),

Gene: StinkyVeggy\_22 Start: 16657, Stop: 17460, Start Num: 27

Candidate Starts for StinkyVeggy\_22:

(Start: 13 @16624 has 9 MA's), (Start: 27 @16657 has 11 MA's), (50, 16765), (51, 16771), (53, 16786), (54, 16789), (57, 16807), (74, 16921), (127, 17206), (130, 17236), (149, 17305),

Gene: StorminNorm\_23 Start: 17897, Stop: 18592, Start Num: 21

Candidate Starts for StorminNorm\_23:

(8, 17837), (Start: 21 @17897 has 179 MA's), (36, 17936), (64, 18098), (93, 18269), (95, 18281), (156, 18572), (160, 18587),

Gene: StrawberryJamm\_30 Start: 16967, Stop: 17914, Start Num: 21

Candidate Starts for StrawberryJamm\_30:

(Start: 21 @16967 has 179 MA's), (33, 16991), (42, 17039), (51, 17087), (131, 17537), (157, 17654), (180, 17759), (187, 17834),

Gene: Struggle\_17 Start: 14252, Stop: 15052, Start Num: 25

Candidate Starts for Struggle\_17:

(Start: 25 @14252 has 282 MA's), (41, 14315), (52, 14372), (53, 14381), (54, 14384), (68, 14480), (74, 14516), (97, 14633), (120, 14765), (123, 14780), (127, 14801), (130, 14831), (149, 14900), (157, 14951), (173, 15026), (174, 15029),

Gene: Stultus\_23 Start: 18402, Stop: 19097, Start Num: 21

Candidate Starts for Stultus\_23:

(Start: 21 @18402 has 179 MA's), (30, 18411), (36, 18441), (52, 18528), (64, 18603), (71, 18651), (93, 18774), (95, 18786), (103, 18807), (131, 18960), (156, 19077), (160, 19092),

Gene: Suffolk\_18 Start: 14698, Stop: 15498, Start Num: 25

Candidate Starts for Suffolk\_18:

(Start: 25 @14698 has 282 MA's), (41, 14761), (52, 14818), (53, 14827), (54, 14830), (68, 14926), (74, 14962), (97, 15079), (120, 15211), (123, 15226), (127, 15247), (130, 15277), (149, 15346), (157, 15397), (163, 15418), (173, 15472), (174, 15475),

Gene: Suigeneris\_20 Start: 16509, Stop: 17345, Start Num: 13

Candidate Starts for Suigeneris\_20:

(2, 16398), (Start: 13 @16509 has 9 MA's), (Start: 27 @16542 has 11 MA's), (48, 16635), (50, 16650), (51, 16656), (53, 16671), (54, 16674), (57, 16692), (74, 16806), (127, 17091), (130, 17121), (145, 17160), (149, 17190), (163, 17262),

Gene: Sunfish\_35 Start: 18236, Stop: 19171, Start Num: 18

Candidate Starts for Sunfish\_35:

(18, 18236), (37, 18287), (61, 18431), (73, 18506), (75, 18515), (76, 18521), (79, 18536), (130, 18809), (149, 18878), (151, 18887), (169, 18986), (181, 19037), (188, 19118), (190, 19145),

Gene: Sunny\_30 Start: 17321, Stop: 17998, Start Num: 21

Candidate Starts for Sunny\_30:

(Start: 21 @17321 has 179 MA's), (42, 17393), (45, 17408), (47, 17414), (54, 17456), (60, 17501), (61, 17507), (64, 17519), (66, 17546), (71, 17567), (82, 17627), (98, 17705), (108, 17741), (123, 17816), (130, 17870), (146, 17906), (149, 17930),

Gene: Surely\_18 Start: 14708, Stop: 15508, Start Num: 25

Candidate Starts for Surely\_18:

(Start: 25 @14708 has 282 MA's), (41, 14771), (52, 14828), (53, 14837), (54, 14840), (68, 14936), (74, 14972), (97, 15089), (120, 15221), (123, 15236), (127, 15257), (130, 15287), (149, 15356), (157, 15407), (163, 15428), (173, 15482), (174, 15485),

Gene: Swiphy\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Swiphy\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (173, 15473), (174, 15476),

Gene: Swish\_18 Start: 14694, Stop: 15494, Start Num: 25

Candidate Starts for Swish\_18:

(Start: 25 @14694 has 282 MA's), (41, 14757), (52, 14814), (53, 14823), (54, 14826), (68, 14922), (74, 14958), (97, 15075), (120, 15207), (123, 15222), (127, 15243), (130, 15273), (149, 15342), (157, 15393), (163, 15414), (173, 15468), (174, 15471),

Gene: TP1604\_16 Start: 16946, Stop: 17644, Start Num: 22

Candidate Starts for TP1604\_16:

(Start: 22 @16946 has 12 MA's), (35, 16976), (39, 16994), (48, 17036), (49, 17048), (52, 17063), (54, 17075), (71, 17186), (74, 17207), (83, 17252), (96, 17318), (108, 17363), (124, 17438), (130, 17486), (131, 17489), (139, 17519), (143, 17531), (149, 17567), (162, 17633),

Gene: TPA2\_27 Start: 17080, Stop: 17883, Start Num: 25

Candidate Starts for TPA2\_27:

(Start: 25 @17080 has 282 MA's), (33, 17098), (43, 17149), (50, 17188), (54, 17212), (60, 17257), (71, 17323), (74, 17344), (83, 17389), (90, 17431), (120, 17590), (126, 17620), (127, 17626), (149, 17728), (165, 17800),

Gene: Talia1610\_83 Start: 50531, Stop: 51187, Start Num: 21

Candidate Starts for Talia1610\_83:

(Start: 21 @50531 has 179 MA's), (60, 50714), (74, 50801), (113, 50981), (120, 51017), (121, 51020),

Gene: TallGrassMM\_18 Start: 14424, Stop: 15224, Start Num: 25

Candidate Starts for TallGrassMM\_18:

(Start: 25 @14424 has 282 MA's), (41, 14487), (52, 14544), (53, 14553), (54, 14556), (68, 14652), (74, 14688), (97, 14805), (120, 14937), (123, 14952), (127, 14973), (130, 15003), (149, 15072), (157, 15123), (163, 15144), (173, 15198), (174, 15201),

Gene: Tangent\_21 Start: 17601, Stop: 18296, Start Num: 21

Candidate Starts for Tangent\_21:

(Start: 21 @17601 has 179 MA's), (30, 17610), (36, 17640), (52, 17727), (64, 17802), (83, 17916), (93, 17973), (95, 17985), (103, 18006), (131, 18159), (139, 18183), (156, 18276), (160, 18291),

Gene: Tangerine\_23 Start: 17903, Stop: 18598, Start Num: 21

Candidate Starts for Tangerine\_23:

(8, 17843), (Start: 21 @17903 has 179 MA's), (36, 17942), (64, 18104), (93, 18275), (95, 18287), (156, 18578), (160, 18593),

Gene: Tank\_23 Start: 16142, Stop: 17065, Start Num: 16

Candidate Starts for Tank\_23:

(Start: 16 @16142 has 12 MA's), (36, 16190), (37, 16196), (39, 16205), (71, 16400), (92, 16517), (119, 16631), (125, 16667), (134, 16721), (143, 16742), (151, 16787), (153, 16793), (157, 16829), (158, 16832), (169, 16889), (171, 16892), (185, 16976),

Gene: Tardus\_25 Start: 18205, Stop: 18894, Start Num: 20

Candidate Starts for Tardus\_25:

(6, 18121), (8, 18148), (Start: 20 @18205 has 16 MA's), (36, 18244), (39, 18259), (50, 18319), (93, 18574), (151, 18841), (156, 18877),

Gene: Teehee\_29 Start: 17965, Stop: 18912, Start Num: 21

Candidate Starts for Teehee\_29:

(Start: 21 @17965 has 179 MA's), (33, 17989), (42, 18037), (51, 18085), (131, 18535), (157, 18652), (180, 18757), (187, 18832),

Gene: Telesworld\_17 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for Telesworld\_17:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Tempo\_27 Start: 16160, Stop: 17101, Start Num: 21

Candidate Starts for Tempo\_27:

(Start: 21 @16160 has 179 MA's), (37, 16205), (87, 16499), (123, 16670), (130, 16724), (131, 16727), (153, 16805), (166, 16874), (167, 16880), (168, 16895), (188, 17039),

Gene: Terij\_26 Start: 16689, Stop: 17393, Start Num: 21

Candidate Starts for Terij\_26:

(15, 16677), (Start: 21 @16689 has 179 MA's), (50, 16800), (54, 16824), (61, 16875), (64, 16887), (71, 16935), (108, 17112), (129, 17226), (130, 17241), (139, 17262), (145, 17280), (156, 17355),

Gene: Thing3\_24 Start: 19151, Stop: 19846, Start Num: 21

Candidate Starts for Thing3\_24:

(Start: 21 @19151 has 179 MA's), (30, 19160), (36, 19190), (52, 19277), (64, 19352), (93, 19523), (95, 19535), (103, 19556), (131, 19709), (156, 19826),

Gene: Thonko\_19 Start: 14179, Stop: 14982, Start Num: 22

Candidate Starts for Thonko\_19:

(Start: 22 @14179 has 12 MA's), (41, 14245), (48, 14275), (54, 14314), (60, 14359), (61, 14365), (74, 14446), (79, 14467), (86, 14512), (104, 14602), (127, 14731), (145, 14800), (149, 14830),

Gene: Thora\_18 Start: 14708, Stop: 15508, Start Num: 25

Candidate Starts for Thora\_18:

(Start: 25 @14708 has 282 MA's), (41, 14771), (52, 14828), (53, 14837), (54, 14840), (68, 14936), (74, 14972), (97, 15089), (120, 15221), (123, 15236), (127, 15257), (130, 15287), (149, 15356), (157, 15407), (163, 15428), (173, 15482), (174, 15485),

Gene: ThreeOh3D2\_18 Start: 14709, Stop: 15509, Start Num: 25

Candidate Starts for ThreeOh3D2\_18:

(Start: 25 @14709 has 282 MA's), (41, 14772), (52, 14829), (53, 14838), (54, 14841), (68, 14937), (74, 14973), (97, 15090), (120, 15222), (123, 15237), (127, 15258), (130, 15288), (149, 15357), (157, 15408), (163, 15429), (173, 15483), (174, 15486),

Gene: Thunderbird\_17 Start: 14408, Stop: 15208, Start Num: 25

Candidate Starts for Thunderbird\_17:

(Start: 25 @14408 has 282 MA's), (41, 14471), (52, 14528), (53, 14537), (54, 14540), (68, 14636), (74, 14672), (97, 14789), (120, 14921), (123, 14936), (127, 14957), (130, 14987), (149, 15056), (157, 15107), (163, 15128), (173, 15182), (174, 15185),

Gene: Tiamoceli\_24 Start: 18020, Stop: 18715, Start Num: 20

Candidate Starts for Tiamoceli\_24:

(Start: 20 @18020 has 16 MA's), (30, 18029), (36, 18059), (48, 18119), (50, 18134), (52, 18146), (74, 18290), (93, 18389), (95, 18401), (117, 18485), (130, 18572), (151, 18656),

Gene: TillyBobJoe\_22 Start: 14938, Stop: 15624, Start Num: 21

Candidate Starts for TillyBobJoe\_22:

(Start: 21 @14938 has 179 MA's), (52, 15064), (75, 15211), (98, 15331), (130, 15487), (139, 15514), (148, 15559), (149, 15562),

Gene: Timmi\_17 Start: 14418, Stop: 15218, Start Num: 25

Candidate Starts for Timmi\_17:

(Start: 25 @14418 has 282 MA's), (41, 14481), (52, 14538), (53, 14547), (54, 14550), (68, 14646), (74, 14682), (97, 14799), (120, 14931), (123, 14946), (127, 14967), (130, 14997), (149, 15066), (157, 15117), (163, 15138), (173, 15192), (174, 15195),

Gene: Tissue\_28 Start: 17458, Stop: 18405, Start Num: 21

Candidate Starts for Tissue\_28:

(Start: 21 @17458 has 179 MA's), (33, 17482), (42, 17530), (51, 17578), (130, 18025), (131, 18028), (157, 18145), (180, 18250), (187, 18325),

Gene: Togo\_22 Start: 15154, Stop: 15840, Start Num: 21

Candidate Starts for Togo\_22:

(Start: 21 @15154 has 179 MA's), (48, 15253), (74, 15424), (75, 15427), (98, 15547), (148, 15775), (149, 15778),

Gene: TomBombadil\_18 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for TomBombadil\_18:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),



Gene: Tomlarah\_18 Start: 14694, Stop: 15494, Start Num: 25

Candidate Starts for Tomlarah\_18:

(Start: 25 @14694 has 282 MA's), (41, 14757), (52, 14814), (53, 14823), (54, 14826), (68, 14922), (74, 14958), (97, 15075), (120, 15207), (123, 15222), (127, 15243), (130, 15273), (149, 15342), (157, 15393), (163, 15414), (173, 15468), (174, 15471),

Gene: Toni\_17 Start: 14404, Stop: 15204, Start Num: 25

Candidate Starts for Toni\_17:

(Start: 25 @14404 has 282 MA's), (41, 14467), (52, 14524), (53, 14533), (54, 14536), (68, 14632), (74, 14668), (97, 14785), (120, 14917), (123, 14932), (127, 14953), (130, 14983), (149, 15052), (157, 15103), (163, 15124), (173, 15178), (174, 15181),

Gene: Tonitrus\_35 Start: 23239, Stop: 23979, Start Num: 28

Candidate Starts for Tonitrus\_35:

(Start: 28 @23239 has 2 MA's), (32, 23254), (50, 23347), (57, 23389), (66, 23461), (69, 23470), (71, 23482), (74, 23503), (78, 23521), (100, 23632), (102, 23641), (104, 23653), (110, 23698), (114, 23710), (126, 23779), (128, 23791), (130, 23815), (150, 23890), (153, 23902),

Gene: Tooj\_18 Start: 14706, Stop: 15506, Start Num: 25

Candidate Starts for Tooj\_18:

(Start: 25 @14706 has 282 MA's), (41, 14769), (52, 14826), (53, 14835), (54, 14838), (68, 14934), (74, 14970), (97, 15087), (120, 15219), (123, 15234), (127, 15255), (130, 15285), (149, 15354), (157, 15405), (163, 15426), (173, 15480), (174, 15483),

Gene: True\_17 Start: 14407, Stop: 15207, Start Num: 25

Candidate Starts for True\_17:

(Start: 25 @14407 has 282 MA's), (41, 14470), (52, 14527), (53, 14536), (54, 14539), (68, 14635), (74, 14671), (97, 14788), (120, 14920), (123, 14935), (127, 14956), (130, 14986), (149, 15055), (157, 15106), (163, 15127), (173, 15181), (174, 15184),

Gene: Trypo\_18 Start: 14696, Stop: 15496, Start Num: 25

Candidate Starts for Trypo\_18:

(Start: 25 @14696 has 282 MA's), (41, 14759), (52, 14816), (53, 14825), (54, 14828), (68, 14924), (74, 14960), (97, 15077), (120, 15209), (123, 15224), (127, 15245), (130, 15275), (149, 15344), (157, 15395), (173, 15470), (174, 15473),

Gene: TurkishDelight\_21 Start: 18601, Stop: 19302, Start Num: 21

Candidate Starts for TurkishDelight\_21:

(12, 18562), (Start: 21 @18601 has 179 MA's), (51, 18715), (52, 18721), (75, 18868), (78, 18883), (99, 18988), (107, 19021), (121, 19087), (143, 19186), (149, 19222), (162, 19291),

Gene: Twister6\_24 Start: 15581, Stop: 16267, Start Num: 21

Candidate Starts for Twister6\_24:

(Start: 21 @15581 has 179 MA's), (48, 15680), (74, 15851), (75, 15854), (98, 15974), (148, 16202), (149, 16205),

Gene: Twonlo\_21 Start: 16638, Stop: 17333, Start Num: 20

Candidate Starts for Twonlo\_21:

(Start: 20 @16638 has 16 MA's), (30, 16647), (36, 16677), (48, 16737), (50, 16752), (52, 16764), (74, 16908), (93, 17007), (95, 17019), (117, 17103), (130, 17190), (151, 17274),

Gene: Tycho\_23 Start: 17995, Stop: 18690, Start Num: 20

Candidate Starts for Tycho\_23:

(Start: 20 @17995 has 16 MA's), (36, 18034), (49, 18106), (64, 18196), (66, 18223), (93, 18367), (95, 18379), (131, 18553), (156, 18670), (160, 18685),

Gene: TyrionL\_17 Start: 14258, Stop: 15058, Start Num: 25

Candidate Starts for TyrionL\_17:

(Start: 25 @14258 has 282 MA's), (41, 14321), (52, 14378), (53, 14387), (54, 14390), (68, 14486), (74, 14522), (97, 14639), (120, 14771), (123, 14786), (127, 14807), (130, 14837), (149, 14906), (157, 14957), (163, 14978), (173, 15032), (174, 15035),

Gene: Tyrumbra\_28 Start: 16425, Stop: 17105, Start Num: 21

Candidate Starts for Tyrumbra\_28:

(Start: 21 @16425 has 179 MA's), (45, 16512), (60, 16605), (64, 16623), (71, 16671), (75, 16695), (82, 16731), (108, 16845), (115, 16872), (123, 16920), (130, 16974), (149, 17034), (162, 17094),

Gene: UAch1\_18 Start: 14717, Stop: 15517, Start Num: 25

Candidate Starts for UAch1\_18:

(Start: 25 @14717 has 282 MA's), (41, 14780), (52, 14837), (53, 14846), (54, 14849), (68, 14945), (74, 14981), (97, 15098), (120, 15230), (123, 15245), (127, 15266), (130, 15296), (149, 15365), (157, 15416), (163, 15437), (173, 15491), (174, 15494),

Gene: UncleHowie\_18 Start: 14406, Stop: 15206, Start Num: 25

Candidate Starts for UncleHowie\_18:

(Start: 25 @14406 has 282 MA's), (41, 14469), (52, 14526), (53, 14535), (54, 14538), (68, 14634), (74, 14670), (97, 14787), (120, 14919), (123, 14934), (127, 14955), (130, 14985), (149, 15054), (157, 15105), (163, 15126), (173, 15180), (174, 15183),

Gene: Usavi\_18 Start: 14708, Stop: 15508, Start Num: 25

Candidate Starts for Usavi\_18:

(Start: 25 @14708 has 282 MA's), (41, 14771), (52, 14828), (53, 14837), (54, 14840), (68, 14936), (74, 14972), (97, 15089), (120, 15221), (123, 15236), (127, 15257), (130, 15287), (149, 15356), (157, 15407), (163, 15428), (173, 15482), (174, 15485),

Gene: Vaishali24\_17 Start: 14359, Stop: 15159, Start Num: 25

Candidate Starts for Vaishali24\_17:

(Start: 25 @14359 has 282 MA's), (41, 14422), (52, 14479), (53, 14488), (54, 14491), (68, 14587), (74, 14623), (97, 14740), (120, 14872), (123, 14887), (127, 14908), (130, 14938), (149, 15007), (157, 15058), (163, 15079), (173, 15133), (174, 15136),

Gene: Valary\_25 Start: 16032, Stop: 16718, Start Num: 21

Candidate Starts for Valary\_25:

(Start: 21 @16032 has 179 MA's), (52, 16158), (75, 16305), (98, 16425), (130, 16581), (139, 16608), (148, 16653), (149, 16656),

Gene: Valjean\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Valjean\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: VanDeWege\_25 Start: 15962, Stop: 16648, Start Num: 21

Candidate Starts for VanDeWege\_25:

(Start: 21 @15962 has 179 MA's), (48, 16061), (74, 16232), (75, 16235), (98, 16355), (148, 16583), (149, 16586),

Gene: Vaticameos\_18 Start: 14397, Stop: 15197, Start Num: 25

Candidate Starts for Vaticameos\_18:

(Start: 25 @14397 has 282 MA's), (41, 14460), (52, 14517), (53, 14526), (54, 14529), (68, 14625), (74, 14661), (97, 14778), (120, 14910), (123, 14925), (127, 14946), (130, 14976), (149, 15045), (157, 15096), (163, 15117), (173, 15171), (174, 15174),

Gene: Veritas\_17 Start: 14246, Stop: 15046, Start Num: 25

Candidate Starts for Veritas\_17:

(Start: 25 @14246 has 282 MA's), (41, 14309), (52, 14366), (53, 14375), (54, 14378), (68, 14474), (74, 14510), (97, 14627), (120, 14759), (123, 14774), (127, 14795), (130, 14825), (149, 14894), (157, 14945), (163, 14966), (173, 15020), (174, 15023),

Gene: Verity\_24 Start: 18380, Stop: 19072, Start Num: 20

Candidate Starts for Verity\_24:

(Start: 20 @18380 has 16 MA's), (36, 18419), (39, 18434), (43, 18455), (44, 18458), (50, 18494), (93, 18749), (151, 19016),

Gene: ViaConlectus\_25 Start: 18946, Stop: 19632, Start Num: 21

Candidate Starts for ViaConlectus\_25:

(6, 18862), (8, 18889), (14, 18925), (Start: 21 @18946 has 179 MA's), (36, 18985), (39, 19000), (50, 19060), (83, 19261), (93, 19315), (117, 19411), (151, 19582), (156, 19618),

Gene: Viceroy\_27 Start: 16730, Stop: 17677, Start Num: 21

Candidate Starts for Viceroy\_27:

(Start: 21 @16730 has 179 MA's), (33, 16754), (42, 16802), (51, 16850), (131, 17300), (157, 17417), (180, 17522), (187, 17597),

Gene: Vincenzo\_19 Start: 17209, Stop: 18015, Start Num: 25

Candidate Starts for Vincenzo\_19:

(9, 17149), (Start: 25 @17209 has 282 MA's), (41, 17272), (52, 17329), (54, 17341), (57, 17359), (74, 17473), (79, 17494), (120, 17722), (127, 17758), (130, 17788), (144, 17824), (149, 17857), (152, 17869), (157, 17908), (174, 17986),

Gene: VioletZ\_18 Start: 16470, Stop: 17276, Start Num: 24

Candidate Starts for VioletZ\_18:

(Start: 24 @16470 has 21 MA's), (41, 16533), (53, 16599), (54, 16602), (57, 16620), (71, 16713), (74, 16734), (79, 16755), (101, 16872), (104, 16890), (120, 16983), (144, 17085), (149, 17118), (152, 17130), (153, 17133), (157, 17169),

Gene: Virapocalypse\_18 Start: 14691, Stop: 15491, Start Num: 25

Candidate Starts for Virapocalypse\_18:

(Start: 25 @14691 has 282 MA's), (41, 14754), (52, 14811), (53, 14820), (54, 14823), (68, 14919), (74, 14955), (97, 15072), (120, 15204), (123, 15219), (127, 15240), (130, 15270), (149, 15339), (157, 15390), (163, 15411), (173, 15465), (174, 15468),

Gene: Virgeve\_17 Start: 14412, Stop: 15212, Start Num: 25

Candidate Starts for Virgeve\_17:

(Start: 25 @14412 has 282 MA's), (41, 14475), (52, 14532), (53, 14541), (54, 14544), (68, 14640), (74, 14676), (97, 14793), (120, 14925), (123, 14940), (127, 14961), (130, 14991), (149, 15060), (157, 15111), (163, 15132), (173, 15186), (174, 15189),

Gene: Vista\_18 Start: 14702, Stop: 15502, Start Num: 25

Candidate Starts for Vista\_18:

(Start: 25 @14702 has 282 MA's), (41, 14765), (52, 14822), (53, 14831), (54, 14834), (68, 14930), (74, 14966), (97, 15083), (120, 15215), (123, 15230), (127, 15251), (130, 15281), (149, 15350), (157, 15401), (163, 15422), (173, 15476), (174, 15479),

Gene: Vivaldi\_18 Start: 14733, Stop: 15533, Start Num: 25

Candidate Starts for Vivaldi\_18:

(Start: 25 @14733 has 282 MA's), (41, 14796), (52, 14853), (53, 14862), (54, 14865), (68, 14961), (74, 14997), (97, 15114), (120, 15246), (123, 15261), (127, 15282), (130, 15312), (149, 15381), (157, 15432), (163, 15453), (173, 15507), (174, 15510),

Gene: Vivi2\_23 Start: 18774, Stop: 19469, Start Num: 21

Candidate Starts for Vivi2\_23:

(Start: 21 @18774 has 179 MA's), (30, 18783), (36, 18813), (52, 18900), (64, 18975), (83, 19089), (93, 19146), (95, 19158), (103, 19179), (131, 19332), (139, 19356), (156, 19449), (160, 19464),

Gene: Vortex\_18 Start: 14413, Stop: 15213, Start Num: 25

Candidate Starts for Vortex\_18:

(Start: 25 @14413 has 282 MA's), (41, 14476), (52, 14533), (53, 14542), (54, 14545), (68, 14641), (74, 14677), (97, 14794), (120, 14926), (123, 14941), (127, 14962), (130, 14992), (149, 15061), (157, 15112), (163, 15133), (173, 15187), (174, 15190),

Gene: Waleliano\_18 Start: 16440, Stop: 17246, Start Num: 24

Candidate Starts for Waleliano\_18:

(Start: 24 @16440 has 21 MA's), (41, 16503), (53, 16569), (54, 16572), (57, 16590), (71, 16683), (74, 16704), (79, 16725), (101, 16842), (104, 16860), (120, 16953), (130, 17019), (144, 17055), (149, 17088), (152, 17100), (153, 17103), (157, 17139),

Gene: Wallhey\_17 Start: 14264, Stop: 15064, Start Num: 25

Candidate Starts for Wallhey\_17:

(Start: 25 @14264 has 282 MA's), (41, 14327), (52, 14384), (53, 14393), (54, 14396), (68, 14492), (74, 14528), (97, 14645), (120, 14777), (123, 14792), (127, 14813), (130, 14843), (149, 14912), (157, 14963), (173, 15038), (174, 15041),

Gene: Waterdiva\_18 Start: 14700, Stop: 15500, Start Num: 25

Candidate Starts for Waterdiva\_18:

(Start: 25 @14700 has 282 MA's), (41, 14763), (52, 14820), (53, 14829), (54, 14832), (68, 14928), (74, 14964), (97, 15081), (120, 15213), (123, 15228), (127, 15249), (130, 15279), (149, 15348), (157, 15399), (163, 15420), (173, 15474), (174, 15477),

Gene: Wayne3\_29 Start: 17728, Stop: 18675, Start Num: 21

Candidate Starts for Wayne3\_29:

(Start: 21 @17728 has 179 MA's), (33, 17752), (42, 17800), (51, 17848), (131, 18298), (157, 18415), (180, 18520), (187, 18595),

Gene: Weher20\_18 Start: 14690, Stop: 15490, Start Num: 25

Candidate Starts for Weher20\_18:

(Start: 25 @14690 has 282 MA's), (41, 14753), (52, 14810), (53, 14819), (54, 14822), (68, 14918), (74, 14954), (97, 15071), (120, 15203), (123, 15218), (127, 15239), (130, 15269), (149, 15338), (157, 15389), (163, 15410), (173, 15464), (174, 15467),

Gene: Wheelie\_27 Start: 17046, Stop: 17993, Start Num: 21

Candidate Starts for Wheelie\_27:

(Start: 21 @17046 has 179 MA's), (33, 17070), (42, 17118), (51, 17166), (131, 17616), (157, 17733), (180, 17838), (187, 17913),

Gene: Wilca\_27 Start: 16100, Stop: 17041, Start Num: 21

Candidate Starts for Wilca\_27:

(Start: 21 @16100 has 179 MA's), (37, 16145), (48, 16199), (87, 16439), (131, 16667), (153, 16745), (157, 16781), (168, 16835), (188, 16979), (191, 17021),

Gene: Wilde\_23 Start: 16071, Stop: 16994, Start Num: 16

Candidate Starts for Wilde\_23:

(Start: 16 @16071 has 12 MA's), (32, 16101), (36, 16119), (37, 16125), (39, 16134), (71, 16329), (92, 16446), (119, 16560), (125, 16596), (134, 16650), (143, 16671), (151, 16716), (153, 16722), (157, 16758), (158, 16761), (169, 16818), (171, 16821), (185, 16905),

Gene: Windsor\_17 Start: 14366, Stop: 15166, Start Num: 25

Candidate Starts for Windsor\_17:

(Start: 25 @14366 has 282 MA's), (41, 14429), (52, 14486), (53, 14495), (54, 14498), (68, 14594), (74, 14630), (97, 14747), (120, 14879), (123, 14894), (127, 14915), (130, 14945), (149, 15014), (157, 15065), (163, 15086), (173, 15140), (174, 15143),

Gene: Wizard\_22 Start: 15288, Stop: 15974, Start Num: 21

Candidate Starts for Wizard\_22:

(Start: 21 @15288 has 179 MA's), (52, 15414), (75, 15561), (98, 15681), (130, 15837), (139, 15864), (148, 15909), (149, 15912),

Gene: Wooper\_20 Start: 16094, Stop: 16906, Start Num: 25

Candidate Starts for Wooper\_20:

(Start: 25 @16094 has 282 MA's), (33, 16112), (48, 16187), (54, 16226), (60, 16271), (74, 16358), (79, 16379), (81, 16397), (90, 16445), (127, 16640), (149, 16742), (163, 16814),

Gene: Xavier\_17 Start: 14418, Stop: 15218, Start Num: 25

Candidate Starts for Xavier\_17:

(Start: 25 @14418 has 282 MA's), (41, 14481), (52, 14538), (53, 14547), (54, 14550), (68, 14646), (74, 14682), (97, 14799), (120, 14931), (123, 14946), (127, 14967), (130, 14997), (149, 15066), (157, 15117), (163, 15138), (173, 15192), (174, 15195),

Gene: Xincheng\_18 Start: 16261, Stop: 17067, Start Num: 24

Candidate Starts for Xincheng\_18:

(Start: 24 @16261 has 21 MA's), (41, 16324), (54, 16393), (57, 16411), (71, 16504), (74, 16525), (79, 16546), (101, 16663), (104, 16681), (120, 16774), (144, 16876), (149, 16909), (152, 16921), (153, 16924), (157, 16960),

Gene: Xkcd426\_22 Start: 24333, Stop: 25025, Start Num: 22

Candidate Starts for Xkcd426\_22:

(Start: 22 @24333 has 12 MA's), (37, 24372), (44, 24405), (48, 24423), (49, 24435), (52, 24450), (62, 24516), (72, 24585), (79, 24615), (80, 24618), (96, 24705), (131, 24876), (143, 24912), (149, 24948), (153, 24963),

Gene: YDN12\_17 Start: 16883, Stop: 17587, Start Num: 22

Candidate Starts for YDN12\_17:

(Start: 22 @16883 has 12 MA's), (35, 16913), (39, 16931), (48, 16973), (49, 16985), (51, 16994), (52, 17000), (54, 17012), (55, 17018), (71, 17123), (74, 17144), (79, 17165), (96, 17255), (124, 17375), (130, 17423), (131, 17426), (139, 17456), (143, 17468), (149, 17504),

Gene: Yago84\_18 Start: 14999, Stop: 15808, Start Num: 25

Candidate Starts for Yago84\_18:

(7, 14930), (11, 14948), (Start: 25 @14999 has 282 MA's), (33, 15017), (48, 15092), (54, 15131), (60, 15176), (74, 15263), (79, 15284), (90, 15350), (127, 15545), (149, 15647), (153, 15662), (163, 15719),

Gene: Yeti\_30 Start: 17302, Stop: 17982, Start Num: 21

Candidate Starts for Yeti\_30:

(Start: 21 @17302 has 179 MA's), (45, 17389), (50, 17413), (61, 17488), (64, 17500), (71, 17548), (82, 17608), (111, 17737), (115, 17749), (123, 17797), (130, 17851), (149, 17911),

Gene: YorkOnyx\_24 Start: 18263, Stop: 18958, Start Num: 20

Candidate Starts for YorkOnyx\_24:

(Start: 20 @18263 has 16 MA's), (36, 18302), (64, 18464), (93, 18635), (95, 18647), (131, 18821), (156, 18938), (160, 18953),

Gene: Yoshand\_18 Start: 14703, Stop: 15503, Start Num: 25

Candidate Starts for Yoshand\_18:

(Start: 25 @14703 has 282 MA's), (41, 14766), (52, 14823), (53, 14832), (54, 14835), (68, 14931), (74, 14967), (97, 15084), (120, 15216), (123, 15231), (127, 15252), (130, 15282), (149, 15351), (157, 15402), (163, 15423), (173, 15477), (174, 15480),

Gene: YouGoGlencoco\_18 Start: 14696, Stop: 15496, Start Num: 25

Candidate Starts for YouGoGlencoco\_18:

(Start: 25 @14696 has 282 MA's), (41, 14759), (52, 14816), (53, 14825), (54, 14828), (68, 14924), (74, 14960), (97, 15077), (120, 15209), (123, 15224), (127, 15245), (130, 15275), (149, 15344), (157, 15395), (163, 15416), (173, 15470), (174, 15473),

Gene: YungMoney\_24 Start: 16576, Stop: 17262, Start Num: 21

Candidate Starts for YungMoney\_24:

(Start: 21 @16576 has 179 MA's), (48, 16675), (74, 16846), (75, 16849), (129, 17110), (139, 17152), (148, 17197), (149, 17200),

Gene: Zagie\_28 Start: 17168, Stop: 18115, Start Num: 21

Candidate Starts for Zagie\_28:

(Start: 21 @17168 has 179 MA's), (33, 17192), (42, 17240), (51, 17288), (130, 17735), (131, 17738), (157, 17855), (180, 17960), (187, 18035),

Gene: Zaider\_19 Start: 14929, Stop: 15729, Start Num: 25

Candidate Starts for Zaider\_19:

(Start: 25 @14929 has 282 MA's), (41, 14992), (52, 15049), (53, 15058), (54, 15061), (68, 15157), (74, 15193), (97, 15310), (120, 15442), (123, 15457), (127, 15478), (130, 15508), (149, 15577), (157, 15628), (163, 15649), (173, 15703), (174, 15706),

Gene: Zelda\_18 Start: 14699, Stop: 15499, Start Num: 25

Candidate Starts for Zelda\_18:

(Start: 25 @14699 has 282 MA's), (41, 14762), (52, 14819), (53, 14828), (54, 14831), (68, 14927), (74, 14963), (97, 15080), (120, 15212), (123, 15227), (127, 15248), (130, 15278), (149, 15347), (157, 15398), (163, 15419), (173, 15473), (174, 15476),

Gene: Zemanar\_19 Start: 16440, Stop: 17246, Start Num: 24

Candidate Starts for Zemanar\_19:

(Start: 24 @16440 has 21 MA's), (41, 16503), (53, 16569), (54, 16572), (57, 16590), (71, 16683), (74, 16704), (79, 16725), (101, 16842), (104, 16860), (120, 16953), (130, 17019), (144, 17055), (149, 17088), (152, 17100), (153, 17103), (157, 17139),

Gene: Zenteno07\_23 Start: 15859, Stop: 16659, Start Num: 25

Candidate Starts for Zenteno07\_23:

(Start: 25 @15859 has 282 MA's), (41, 15922), (53, 15988), (54, 15991), (74, 16123), (97, 16240), (104, 16279), (149, 16507), (159, 16564),

Gene: Zhafia\_31 Start: 17524, Stop: 18471, Start Num: 21

Candidate Starts for Zhafia\_31:

(Start: 21 @17524 has 179 MA's), (33, 17548), (42, 17596), (51, 17644), (131, 18094), (157, 18211), (180, 18316), (187, 18391),

Gene: Zipp\_24 Start: 19029, Stop: 19721, Start Num: 20

Candidate Starts for Zipp\_24:

(Start: 20 @19029 has 16 MA's), (36, 19068), (39, 19083), (43, 19104), (44, 19107), (50, 19143), (93, 19398), (151, 19665),

Gene: Zitch\_26 Start: 18227, Stop: 18913, Start Num: 21

Candidate Starts for Zitch\_26:

(6, 18143), (8, 18170), (14, 18206), (Start: 21 @18227 has 179 MA's), (36, 18266), (39, 18281), (50, 18341), (93, 18596), (151, 18863), (156, 18899),

Gene: Zonia\_18 Start: 14713, Stop: 15513, Start Num: 25

Candidate Starts for Zonia\_18:

(Start: 25 @14713 has 282 MA's), (41, 14776), (52, 14833), (53, 14842), (54, 14845), (68, 14941), (74, 14977), (97, 15094), (120, 15226), (123, 15241), (127, 15262), (130, 15292), (149, 15361), (157, 15412), (173, 15487), (174, 15490),

Gene: phiAsp2\_16 Start: 10966, Stop: 11655, Start Num: 22

Candidate Starts for phiAsp2\_16:

(11, 10918), (Start: 22 @10966 has 12 MA's), (66, 11194), (69, 11203), (71, 11215), (75, 11239), (82, 11278), (94, 11341), (112, 11416), (118, 11443), (123, 11473), (124, 11476), (130, 11524),