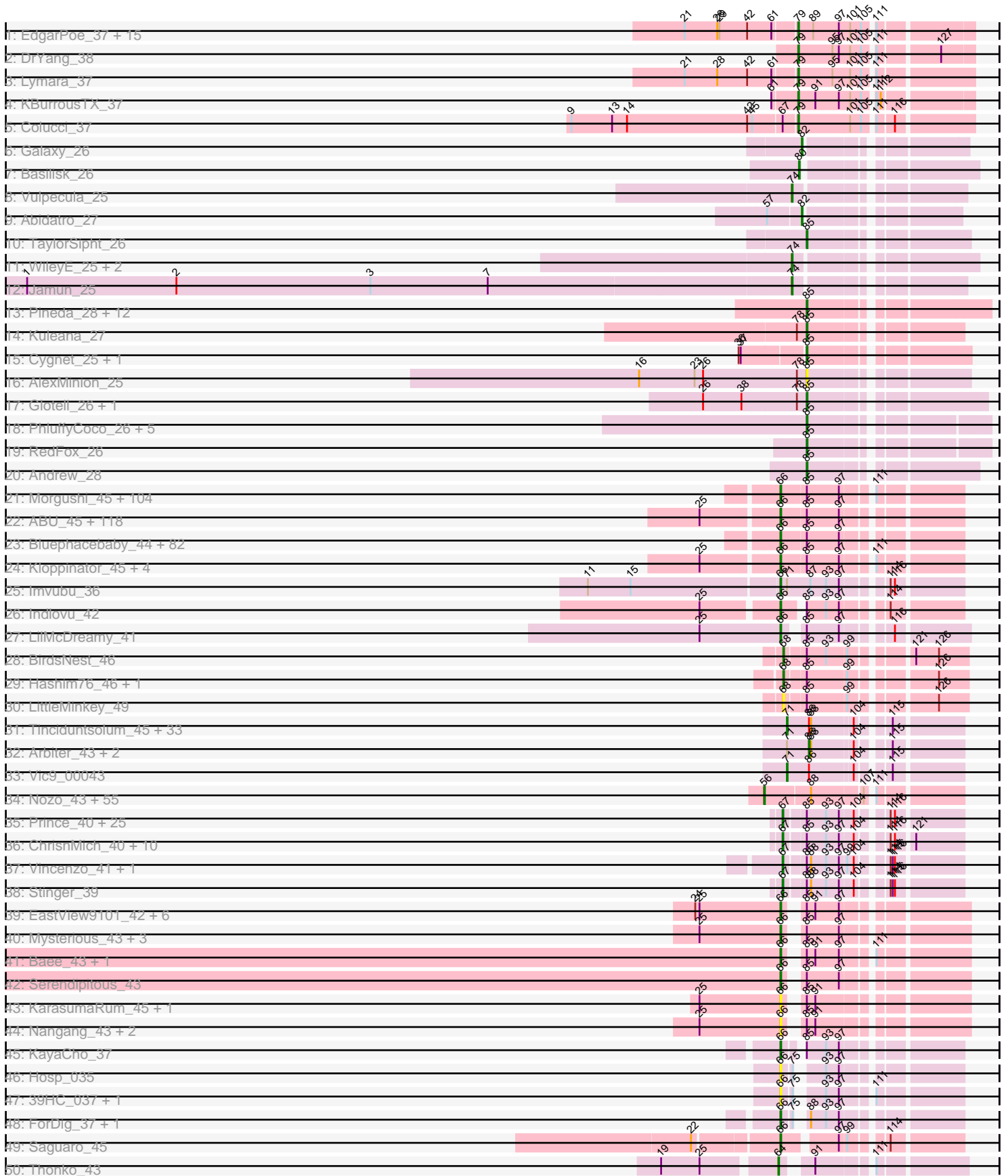
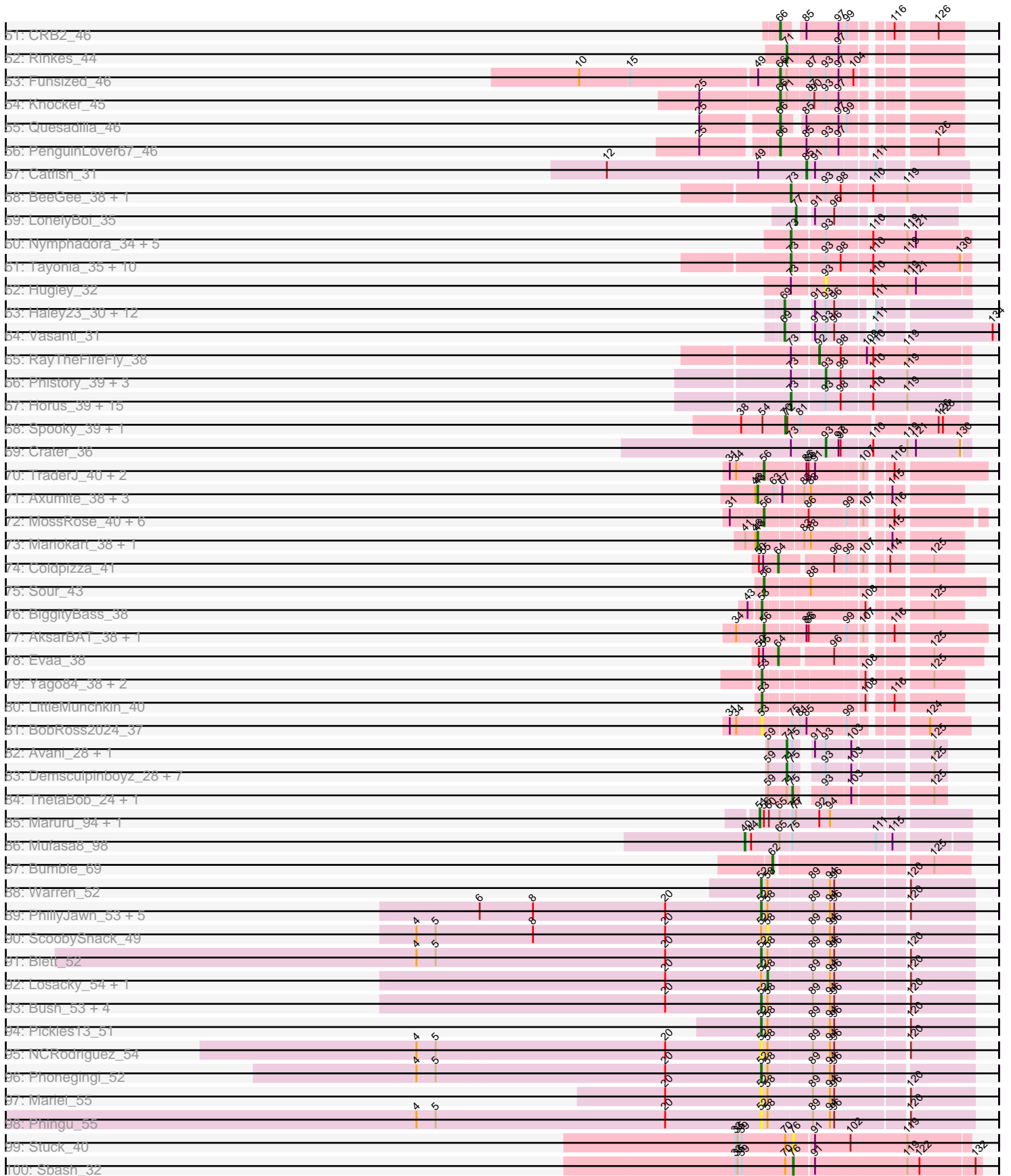


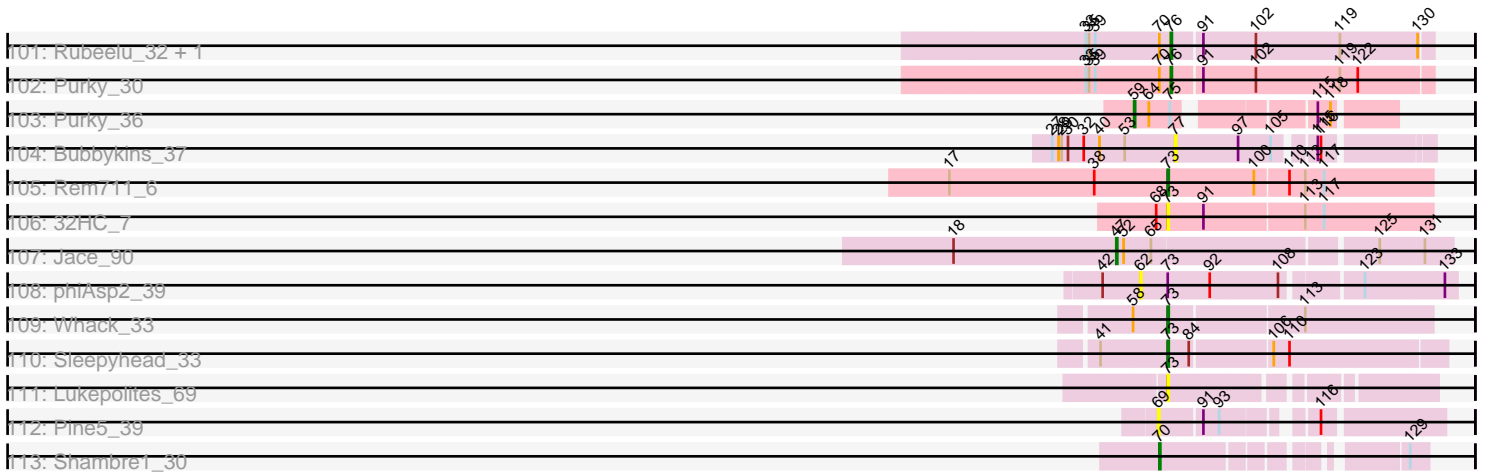
Pham 294303



Pham 294303



Pham 294303



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 294303 Report

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

Pham number 294303 has 682 members, 96 are drafts.

Phages represented in each track:

- Track 1 : EdgarPoe\_37, Tophat\_37, Chubster\_37, Mordred\_37, PrincessTrina\_37, JayCookie\_37, Chipper1996\_370, Conboy\_37, JaNo\_37, Chocolat\_37, HumptyDumpty\_37, Kabreeze\_37, Linus\_37, RosiePosie\_37, MoyaNatalis\_37, Scavito\_37
- Track 2 : DrYang\_38
- Track 3 : Lymara\_37
- Track 4 : KBurrousTX\_37
- Track 5 : Colucci\_37
- Track 6 : Galaxy\_26
- Track 7 : Basilisk\_26
- Track 8 : Vulpecula\_25
- Track 9 : Abidatro\_27
- Track 10 : TaylorSipht\_26
- Track 11 : WileyE\_25, Chickaboom\_25, Brynnie\_25
- Track 12 : Jamun\_25
- Track 13 : Pineda\_28, Polka\_26, Coral\_26, Colusalem\_27, Lunar\_27, Orcanus\_26, Toad24\_27, Cote\_27, Daob\_27, Amelia\_27, OtsoOtso\_26, Melons\_27, HannahPhantana\_27
- Track 14 : Kuleana\_27
- Track 15 : Cygnet\_25, Antrice\_26
- Track 16 : AlexMinion\_25
- Track 17 : Glotell\_26, Leona\_25
- Track 18 : PhluffyCoco\_26, Amphitrite\_26, DanHam62\_26, KHumphrey\_26, Atlantica\_26, Camara\_26
- Track 19 : RedFox\_26
- Track 20 : Andrew\_28
- Track 21 : Morgushi\_45, MiniBoss\_45, Soile\_45, Beaglebox\_44, Haleema\_44, Solosis\_44, Jesabah\_45, Lulumae\_44, Telesworld\_44, Emiris\_45, Brilliant\_45, Cobra\_45, Swish\_45, Wallhey\_44, Vaishali24\_44, Orfeu\_44, Ricotta\_44, JacAttac\_45, Mikota\_45, Iridessa\_45, KingTut\_36, Vaticameos\_41, Vortex\_45, PallasAthena\_45, Fozzie\_44, Apizium\_44, CamL\_45, Khan1\_45, SallyH\_45, MRabcd\_44, Puhltonio\_45, Andre\_45, Lehmann\_45, GeneCoco\_45, Timmi\_44, HSavage\_45, Maskar\_44, Dice\_44, Derpp\_44, Carthage\_43, TallGrassMM\_45, Labeouficaum\_44, Pherdinand\_45, Cannibal\_45, Dione\_44, Pinkman\_44, Riverton\_44, Samaymay\_45, LuckyMarjie\_44, DuchessDung\_43, Pacifista\_44, Cher\_44, Nathan\_45, Gwennie1\_45, Aleia\_45, MrPhizzler\_45, RedMaple\_44, Murdoc\_45, Serpentine\_0045, Grand2040\_44, KLucky39\_45, Simielle\_44, Zonia\_45,

Maru\_44, Rimu\_45, Triad\_45, Mcshane\_44, Yoshand\_45, BlackStallion\_45, Gareth\_44, Kwksand96\_44, Banjo\_44, Kwadwo\_44, Cornbread\_44, Frankicide\_45, Freya\_44, KlimbOn\_45, Piglet\_0044, Phunky\_45, Roy17\_45, OSmaximus\_45, Ashraf\_44, ImtiyazSitla\_44, Serendipity\_45, Mana\_44, Sheila\_45, QueenBeane\_45, Gyarad\_0045, RedRaider89\_46, ElvisPhasley\_45, PinheadLarry\_45, Xavier\_44, MelsMeow\_44, Longacauda\_44, Toni\_44, TyrionL\_44, Childish\_44, Newman\_45, Hocus\_44, Sigman\_45, Legolas\_44, FluffyNinja\_45, Phareon\_45, Daffy\_45, Inverness\_45

- Track 22 : ABU\_45, TooFast2Furius\_47, Spartan300\_45, PhrodoBaggins\_44, Badfish\_45, LasagnaCat\_45, DoesntMatter\_44, Horchata\_45, Scrick\_45, LostAndPhound\_44, Chute\_44, Katniss\_45, Orion\_45, Keitherie\_45, Scoot17C\_45, Charles1\_45, Megatron\_45, Omniscient\_45, PhatCats2014\_45, Lulwa\_45, Held\_45, HenryJackson\_44, GreenChile\_45, Harvey\_45, Robyn\_44, Nyala\_44, DaddyDaniels\_45, BlacksBerry\_44, Olak\_44, AltPhacts\_45, Morty\_45, DonSanchon\_44, Gophee\_45, Potter\_44, HighStump\_44, FleetyMac\_45, ShadowBud\_45, Aonishiki\_46, OneBrain\_46, CampRoach\_45, Kimbrough\_45, LeiMonet\_45, Fang\_45, ShiVal\_45, Craff\_45, Lumine\_44, TomBombadil\_45, Jiraiya\_44, CharlieGBrown\_44, True\_44, Anderson\_45, Struggle\_44, Hekos\_42, EmpTee\_45, SirBeauregard\_45, Adriana\_45, Mesmerelda\_44, Chaelin\_45, Mecca\_44, Valjean\_45, PG1\_45, Megamind20\_45, Roscoe\_46, Chuni\_44, Plata\_45, Vivaldi\_45, DolOn\_46, Nacho\_0045, Chorkpop\_45, SassyCat97\_44, Numberten\_45, DelRivs\_44, Giraffe\_45, MitKao\_45, Boehler\_45, Fringe\_45, Aelin\_44, Flake\_46, Inchworm\_45, Bishoperium\_44, Chah\_46, Olive\_45, SDcharge11\_45, Oline\_44, Tomlarah\_45, Karn\_44, Manad\_44, Jiminy\_44, Quisquilliae\_45, Mosaic\_44, Podrick\_45, Selr12\_45, Larson\_46, ThreeOh3D2\_45, Windsor\_44, Skippy\_45, Squiggle\_45, Coletti\_45, Schadenfreude\_44, Lopsy\_44, CheetO\_45, Duggie\_44, Mutante\_44, Crownjwl\_45, BoogieWoogie\_44, IsaacEli\_45, Trypo\_45, ProfessorX\_45, Cornobble\_44, LeeLot\_45, Squid\_45, Kikipoo\_45, Doddsville\_45, Thunderbird\_44, Lego3393\_44, Virgeve\_44, Durga\_45, LemonSlice\_45, Antonia\_44
- Track 23 : Bluephacebaby\_44, Hamish\_45, PhenghisKhan\_44, JangoPhett\_45, Eremos\_45, Happabalu\_45, AbsoluteMadLad\_44, PhrankReynolds\_43, Colbert\_45, UAch1\_45, Altwerkus\_44, HogWash\_45, Phipps\_45, Jillium\_44, Slatt\_45, FugateOSU\_44, Roliet\_45, Phamished\_45, Mag7\_44, Lasso\_45, KingVeVeVe\_45, Tooj\_45, Hartsy\_45, FremontTroll\_45, BlueHusk\_45, Mesh1\_45, Kahve\_44, PhatLouie\_45, Daka\_46, Oosterbaan\_45, YouGoGlencoco\_45, Soto\_45, Matalotodo\_45, Placalicious\_44, Zaider\_46, Cosmoli16\_44, Caspiroi\_44, FriarPreacher\_44, JDog\_44, Haimas\_45, DirtJuice\_45, Zelda\_45, Buckeye\_45, Thora\_45, Orwigg\_44, Hetaeria\_45, Phleuron\_44, Basato\_46, Swiphy\_45, Usavi\_45, Pipsqueak\_45, Melc17\_45, Burr\_44, Veritas\_44, BatteryCK\_44, Mulan\_44, MichaelPhcott\_44, Prickles\_45, Iridoclysis\_45, Riggan\_45, Magic8\_45, Weher20\_45, Chunky\_45, Gwilliam\_45, SilverBell\_45, OliverWalter\_45, Waterdiva\_45, Nicole21\_45, JakeO\_44, Suffolk\_45, Chipette\_46, Kailash\_45, Phergie\_44, Schueller\_44, Dingo\_45, AngelCake\_45, Dati\_45, Vista\_45, Etaye\_45, Sophia\_44, Surely\_45, Virapocalypse\_45, Hertubise\_45
- Track 24 : Kloppinator\_45, Plmatters\_45, UncleHowie\_45, Pops\_45, Eugenia\_45
- Track 25 : Imvubu\_36
- Track 26 : Indlovu\_42
- Track 27 : LilMcDreamy\_41
- Track 28 : BirdsNest\_46
- Track 29 : Hashim76\_46, Zenteno07\_48
- Track 30 : LittleMinkey\_49
- Track 31 : Tinciduntolum\_45, Hedgerow\_44, Brownie5\_44, Rhinoforte\_44, LilSmirk\_44, Boyle\_44, Eaglehorse\_44, Ares\_44, Lars\_44, FrenchFry\_44,

Bananafish\_44, Blocker23\_44, Tres\_44, Holeinone\_44, Sabella\_43,  
PrinceCharming\_44, TA17A\_45, Allegro\_44, Glass\_44, Kheth\_44, Kaleb\_44,  
Phantasmagoria\_44, LizLemon\_44, Lephleur\_44, MasterPo\_44, Calamitous\_44,  
Faze9\_43, ItsyBitsy1\_44, West99\_44, Coffee\_44, Kolhan\_44, Godines\_44,  
Laurie\_43, Opia\_44

- Track 32 : Arbiter\_43, Qyrzula\_41, Rosebush\_43
- Track 33 : Vic9\_00043
- Track 34 : Nozo\_43, Yahalom\_43, Daisy\_43, Rita1961\_43, Obutu\_43, Gervas\_43,  
Philly\_42, Marlia\_43, Corofin\_43, Heathcliff\_43, Neos5\_43, Olivio\_42, Morty007\_43,  
Chalmers\_43, Chandler\_43, Mortcellus\_42, Abinghost\_43, Gadget\_44, Devonte\_43,  
Deenasa\_43, Casbah\_42, OrangeOswald\_43, Shenandoah\_43, Compostia\_44,  
LestyG\_43, TinyTerror\_43, SynergyX\_43, Baloo\_43, MmasiCarm\_43,  
SwainyDoc\_43, Kamiyu\_43, Bernardo\_44, Athena\_44, Jackstina\_40,  
Mulaychimus\_43, Phlyer\_43, Yinz\_43, ChaChing\_43, Ben11\_42, Halfpint\_42,  
Briakila\_44, Pipefish\_45, Phayeta\_44, Phaedrus\_41, Glubnar\_44, HarveySr\_43,  
RomaT\_43, Chentzyk\_43, Akoma\_43, Marley1013\_43, GlenHope\_44, Tydolla\_43,  
RagingRooster\_43, SlippinJimmy\_43, Kronus\_42, Audrey\_43
- Track 35 : Prince\_40, Zemanar\_41, JaguarMi\_40, Fortunato\_41, Apex\_41,  
Fanaw\_39, Nigel\_39, Heath\_39, Hydro\_40, JAMaL\_40, VioletZ\_41, BobbyK\_41,  
QueenPie\_39, JoyceMaria\_40, Austelle\_41, Waleliano\_40, Mudslide\_40,  
Lolalove\_40, BrownCNA\_42, Mithril\_40, RawrgerThat\_41, Xincheng\_39,  
Hangman\_40, Frederick\_41, Magpie\_39, Cooper\_41
- Track 36 : ChrisnMich\_40, LittleDigger\_39, Antihero\_39, Renkei\_39, Ahwei\_39,  
Nanao\_39, Hally898\_39, GinPorsche\_40, Lambano\_39, Epah\_39, Poster\_39
- Track 37 : Vincenzo\_41, AlanGrant\_42
- Track 38 : Stinger\_39
- Track 39 : EastView9101\_42, SirJeffery\_44, Rita130\_44, Acadian\_44, Reccee\_45,  
Donny\_44, Suigeneris\_44
- Track 40 : Mysterious\_43, Reprobate\_44, Nehemiah\_43, Phelemich\_43
- Track 41 : Bae\_43, Rich\_42
- Track 42 : Serendipitous\_43
- Track 43 : KarasumaRum\_45, StinkyVeggy\_45
- Track 44 : Nangang\_43, Shenyu\_43, DigitDog\_43
- Track 45 : KayaCho\_37
- Track 46 : Hosp\_035
- Track 47 : 39HC\_037, 40BC\_037
- Track 48 : ForDig\_37, Jolie1\_037
- Track 49 : Saguaro\_45
- Track 50 : Thonko\_43
- Track 51 : CRB2\_46
- Track 52 : Rinkes\_44
- Track 53 : Funsized\_46
- Track 54 : Knocker\_45
- Track 55 : Quesadilla\_46
- Track 56 : PenguinLover67\_46
- Track 57 : Catfish\_31
- Track 58 : BeeGee\_38, RavenCo17\_36
- Track 59 : LonelyBoi\_35
- Track 60 : Nymphadora\_34, Bosnia\_34, Herod\_34, BatStarr\_34, Eviarto\_34,  
TimTam\_34
- Track 61 : Tayonia\_35, Eudoria\_35, Maridalia\_34, Neobush\_35, Manasvini\_35,  
Suscepit\_35, Zameen\_35, Polly\_32, Kita\_36, Antonio\_35, Trumpet\_35
- Track 62 : Hugley\_32

- Track 63 : Haley23\_30, Clap\_30, Sahara\_29, Mocha12\_30, GemG\_30, Sproutie\_30, Ebert\_31, Jalleen\_30, Cynthia\_30, TuertoX\_30, Whiteclaw\_30, Savage\_30, Gizermo\_30
- Track 64 : Vasanti\_31
- Track 65 : RayTheFireFly\_38
- Track 66 : Phistory\_39, Apricot\_38, BENtherdunthat\_38, Frickyeah\_39
- Track 67 : Horus\_39, BearBQ\_38, ShawBrad\_38, Lutum\_39, Asapag\_39, Ecliptus\_40, Leroy\_39, Phabuloso\_36, Whitney\_42, ODay\_42, Periwinkle\_42, Budski\_39, Getalong\_40, Kenna\_38, Holliday\_38, CheeseTouch\_37
- Track 68 : Spooky\_39, Squiddly\_40
- Track 69 : Crater\_36
- Track 70 : TraderJ\_40, Yeshua\_40, Wooper\_40
- Track 71 : Axumite\_38, Shatter\_38, Ligma\_38, Fresco\_38
- Track 72 : MossRose\_40, MakoManhole\_40, CaiB\_40, AnarQue\_40, FelixTres\_40, Blackpen\_40, CloverMinnie\_40
- Track 73 : Mariokart\_38, CharlottesWeb\_38
- Track 74 : Coldpizza\_41
- Track 75 : Sour\_43
- Track 76 : BiggityBass\_38
- Track 77 : AksarBAT\_38, NHagos\_38
- Track 78 : Evaa\_38
- Track 79 : Yago84\_38, Sisko\_38, AnClar\_39
- Track 80 : LittleMunchkin\_40
- Track 81 : BobRoss2024\_37
- Track 82 : Avani\_28, ShroomBoi\_22
- Track 83 : Demsculpinboyz\_28, Bipolar\_22, Che9d\_28, Ogopogo\_25, Kersh\_23, Kenuha5\_22, Pollywog\_25, Yoshi\_28
- Track 84 : ThetaBob\_24, Madiba\_23
- Track 85 : Maruru\_94, Sonali\_93
- Track 86 : Mufasa8\_98
- Track 87 : Bumble\_69
- Track 88 : Warren\_52
- Track 89 : PhillyJawn\_53, Appa\_52, Guzman\_52, Winchester007\_68, CookieDog\_52, Dropshot\_52
- Track 90 : ScoobySnack\_49
- Track 91 : Blett\_52
- Track 92 : Losacky\_54, Antuna\_54
- Track 93 : Bush\_53, Jakelyne\_55, Carrillo\_54, Violeta\_54, MenE\_54
- Track 94 : Pickles13\_51
- Track 95 : NCRodriguez\_54
- Track 96 : Phonegingi\_52
- Track 97 : Mariel\_55
- Track 98 : Phingu\_55
- Track 99 : Stuck\_40
- Track 100 : Sbash\_32
- Track 101 : Rubeelu\_32, Butters\_32
- Track 102 : Purky\_30
- Track 103 : Purky\_36
- Track 104 : Bubbykins\_37
- Track 105 : Rem711\_6
- Track 106 : 32HC\_7
- Track 107 : Jace\_90
- Track 108 : phiAsp2\_39

- Track 109 : Whack\_33
- Track 110 : Sleepyhead\_33
- Track 111 : Lukepolitites\_69
- Track 112 : Pine5\_39
- Track 113 : Shambre1\_30

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

The start number called the most often in the published annotations is 66, it was called in 303 of the 586 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 39HC\_037, 40BC\_037, ABU\_45, AbsoluteMadLad\_44, Acadian\_44, Adriana\_45, Aelin\_44, Aleia\_45, AltPhacts\_45, Altwerkus\_44, Anderson\_45, Andre\_45, AngelCake\_45, Antonia\_44, Aonishiki\_46, Apizium\_44, Ashraf\_44, Badfish\_45, Bae\_43, Banjo\_44, Basato\_46, BatteryCK\_44, Beaglebox\_44, Bishoperium\_44, BlackStallion\_45, BlacksBerry\_44, BlueHusk\_45, Bluephacebaby\_44, Boehler\_45, BoogieWoogie\_44, Brilliant\_45, Buckeye\_45, Burr\_44, CRB2\_46, CamL\_45, CampRoach\_45, Cannibal\_45, Carthage\_43, Caspiboi\_44, Chaelin\_45, Chah\_46, Charles1\_45, CharlieGBrown\_44, CheetO\_45, Cher\_44, Childish\_44, Chipette\_46, Chorkpop\_45, Chuni\_44, Chunky\_45, Chute\_44, Cobra\_45, Colbert\_45, Coletti\_45, Cornbread\_44, Cornobble\_44, Cosmolli16\_44, Craff\_45, Crownjwl\_45, DaddyDaniels\_45, Daffy\_45, Daka\_46, Dati\_45, DelRivs\_44, Derpp\_44, Dice\_44, DigitDog\_43, Dingo\_45, Dione\_44, DirtJuice\_45, Doddsville\_45, DoesntMatter\_44, DoIOn\_46, DonSanchon\_44, Donny\_44, DuchessDung\_43, Duggie\_44, Durga\_45, EastView9101\_42, ElvisPhasley\_45, Emiris\_45, EmpTee\_45, Eremos\_45, Etaye\_45, Eugenia\_45, Fang\_45, Flake\_46, FleetyMac\_45, FluffyNinja\_45, ForDig\_37, Fozzie\_44, Frankicide\_45, FremontTroll\_45, Freya\_44, FriarPreacher\_44, Fringe\_45, FugateOSU\_44, Funsized\_46, Gareth\_44, GeneCoco\_45, Giraffe\_45, Gophee\_45, Grand2040\_44, GreenChile\_45, Gwennie1\_45, Gwilliam\_45, Gyarad\_0045, HSavage\_45, Haimas\_45, Haleema\_44, Hamish\_45, Happabalu\_45, Hartsy\_45, Harvey\_45, Hekos\_42, Held\_45, HenryJackson\_44, Hertubise\_45, Hetaeria\_45, HighStump\_44, Hocus\_44, HogWash\_45, Horchata\_45, Hosp\_035, ImtiyazSitla\_44, Imvubu\_36, Inchworm\_45, Indlovu\_42, Inverness\_45, Iridessa\_45, Iridoclysis\_45, IsaacEli\_45, JDog\_44, JacAttac\_45, JakeO\_44, JangoPhett\_45, Jesabah\_45, Jillium\_44, Jiminy\_44, Jiraiya\_44, Jolie1\_037, KLucky39\_45, Kahve\_44, Kailash\_45, KarasumaRum\_45, Karn\_44, Katniss\_45, KayaCho\_37, Keitherie\_45, Khan1\_45, Kikipoo\_45, Kimbrough\_45, KingTut\_36, KingVeVeVe\_45, KlimbOn\_45, Kloppinator\_45, Knocker\_45, Kwadwo\_44, Kwksand96\_44, Labeouficaum\_44, Larson\_46, LasagnaCat\_45, Lasso\_45, LeeLot\_45, Lego3393\_44, Legolas\_44, Lehmann\_45, LeiMonet\_45, LemonSlice\_45, LilMcDreamy\_41, Longacauda\_44, Lopsy\_44, LostAndPhound\_44, LuckyMarjie\_44, Lulumae\_44, Lulwa\_45, Lumine\_44, MRabcd\_44, Mag7\_44, Magic8\_45, Mana\_44, Manad\_44, Maru\_44, Maskar\_44, Matalotodo\_45, Mcshane\_44, Mecca\_44, Megamind20\_45, Megatron\_45, Melc17\_45, MelsMeow\_44, Mesh1\_45, Mesmerelda\_44, MichaelPhcott\_44, Mikota\_45, MiniBoss\_45, MitKao\_45, Morgushi\_45, Morty\_45, Mosaic\_44, MrPhizzler\_45, Mulan\_44, Murdoc\_45, Mutante\_44, Mysterious\_43, Nacho\_0045, Nangang\_43, Nathan\_45, Nehemiah\_43, Newman\_45, Nicole21\_45, Numberten\_45, Nyala\_44, OSmaximus\_45, Olak\_44, Oline\_44, Olive\_45, OliverWalter\_45, Omniscient\_45, OneBrain\_46, Oosterbaan\_45, Orfeu\_44, Orion\_45, Orwig\_44,

PG1\_45, Pacifista\_44, PallasAthena\_45, PenguinLover67\_46, Phamished\_45, Phareon\_45, PhatCats2014\_45, PhatLouie\_45, Phelemich\_43, PhenghisKhan\_44, Pherdinand\_45, Phergie\_44, Phipps\_45, Phleuron\_44, PhrankReynolds\_43, PhrodoBaggins\_44, Phunky\_45, Piglet\_0044, PinheadLarry\_45, Pinkman\_44, Pipsqueak\_45, Placalicious\_44, Plata\_45, Plmatters\_45, Podrick\_45, Pops\_45, Potter\_44, Prickles\_45, ProfessorX\_45, Puhltonio\_45, QueenBeane\_45, Quesadilla\_46, Quisquilliae\_45, Reccee\_45, RedMaple\_44, RedRaider89\_46, Reprobate\_44, Rich\_42, Ricotta\_44, Riggan\_45, Rimu\_45, Rita130\_44, Riverton\_44, Robyn\_44, Roliet\_45, Roscoe\_46, Roy17\_45, SDcharge11\_45, Saguaro\_45, SallyH\_45, Samaymay\_45, SassyCat97\_44, Schadenfreude\_44, Schueller\_44, Scoot17C\_45, Scrick\_45, Selr12\_45, Serendipitous\_43, Serendipity\_45, Serpentine\_0045, ShadowBud\_45, Sheila\_45, Shenyu\_43, ShiVal\_45, Sigman\_45, SilverBell\_45, Simielle\_44, SirBeauregard\_45, SirJeffery\_44, Skippy\_45, Slatt\_45, Soile\_45, Solosis\_44, Sophia\_44, Soto\_45, Spartan300\_45, Squid\_45, Squiggle\_45, StinkyVeggy\_45, Struggle\_44, Suffolk\_45, Suigeneris\_44, Surely\_45, Swiphy\_45, Swish\_45, TallGrassMM\_45, Telesworld\_44, Thora\_45, ThreeOh3D2\_45, Thunderbird\_44, Timmi\_44, TomBombadil\_45, Tomlarah\_45, Toni\_44, TooFast2Furius\_47, Tooj\_45, Triad\_45, True\_44, Trypo\_45, TyrionL\_44, UAch1\_45, UncleHowie\_45, Usavi\_45, Vaishali24\_44, Valjean\_45, Vaticameos\_41, Veritas\_44, Virapocalypse\_45, Virgeve\_44, Vista\_45, Vivaldi\_45, Vortex\_45, Wallhey\_44, Waterdiva\_45, Weher20\_45, Windsor\_44, Xavier\_44, Yoshand\_45, YouGoGlencoco\_45, Zaider\_46, Zelda\_45, Zonia\_45,

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:

- 32HC\_7, Abidatro\_27, Abinghost\_43, Ahwei\_39, Akoma\_43, AksarBAT\_38, AlanGrant\_42, AlexMinion\_25, Allegro\_44, Amelia\_27, Amphitrite\_26, AnClar\_39, AnarQue\_40, Andrew\_28, Antihero\_39, Antonio\_35, Antrice\_26, Antuna\_54, Apex\_41, Appa\_52, Apricot\_38, Arbiter\_43, Ares\_44, Asapag\_39, Athena\_44, Atlantica\_26, Audrey\_43, Austelle\_41, Avani\_28, Axumite\_38, BENtherdunthat\_38, Baloo\_43, Bananafish\_44, Basilisk\_26, BatStarr\_34, BearBQ\_38, BeeGee\_38, Ben11\_42, Bernardo\_44, BiggityBass\_38, Bipolar\_22, BirdsNest\_46, Blackpen\_40, Blett\_52, Blocker23\_44, BobRoss2024\_37, BobbyK\_41, Bosnia\_34, Boyle\_44, Briakila\_44, BrownCNA\_42, Brownie5\_44, Brynnie\_25, Bubbykins\_37, Budski\_39, Bumble\_69, Bush\_53, Butters\_32, CaiB\_40, Calamitous\_44, Camara\_26, Carrillo\_54, Casbah\_42, Catfish\_31, ChaChing\_43, Chalmers\_43, Chandler\_43, CharlottesWeb\_38, Che9d\_28, CheeseTouch\_37, Chentzyk\_43, Chickaboom\_25, Chipper1996\_370, Chocolat\_37, ChrisnMich\_40, Chubster\_37, Clap\_30, CloverMinnie\_40, Coffee\_44, Coldpizza\_41, Colucci\_37, Colusalem\_27, Compostia\_44, Conboy\_37, CookieDog\_52, Cooper\_41, Coral\_26, Corofin\_43, Cote\_27, Crater\_36, Cygnet\_25, Cynthia\_30, Daisy\_43, DanHam62\_26, Daob\_27, Deenasa\_43, Demsculpinboyz\_28, Devonte\_43, DrYang\_38, Dropshot\_52, Eaglehorse\_44, Ebert\_31, Ecliptus\_40, EdgarPoe\_37, Epah\_39, Eudoria\_35, Evaa\_38, Eviarto\_34, Fanaw\_39, Faze9\_43, FelixTres\_40, Fortunato\_41, Frederick\_41, FrenchFry\_44, Fresco\_38, Frickyeah\_39, Gadget\_44, Galaxy\_26, GemG\_30, Gervas\_43, Getalong\_40, GinPorsche\_40, Gizermo\_30, Glass\_44, GlenHope\_44, Glotell\_26, Glubnar\_44, Godines\_44, Guzman\_52, Haley23\_30, Halfpint\_42, Hally898\_39, Hangman\_40, HannahPhantana\_27, HarveySr\_43, Hashim76\_46, Heath\_39, Heathcliff\_43, Hedgerow\_44, Herod\_34, Holeinone\_44, Holliday\_38, Horus\_39, Hugley\_32, HumptyDumpty\_37, Hydro\_40, ItsyBitsy1\_44, JAMaL\_40, JaNo\_37, Jace\_90, Jackstina\_40, JaguarMi\_40, Jakelyne\_55,

Jalleen\_30, Jamun\_25, JayCookie\_37, JoyceMaria\_40, KBurrousTX\_37, KHumphrey\_26, Kabreeze\_37, Kaleb\_44, Kamiyu\_43, Kenna\_38, Kenuha5\_22, Kersh\_23, Kheth\_44, Kita\_36, Kolhan\_44, Kronus\_42, Kuleana\_27, Lambano\_39, Lars\_44, Laurie\_43, Leona\_25, Lephleur\_44, Leroy\_39, LestyG\_43, Ligma\_38, LilSmirk\_44, Linus\_37, LittleDigger\_39, LittleMinkey\_49, LittleMunchkin\_40, LizLemon\_44, Lolalove\_40, LonelyBoi\_35, Losacky\_54, Lukepolites\_69, Lunar\_27, Lutum\_39, Lymara\_37, Madiba\_23, Magpie\_39, MakoManhole\_40, Manasvini\_35, Maridalia\_34, Mariel\_55, Mariokart\_38, Marley1013\_43, Marlia\_43, Maruru\_94, MasterPo\_44, Melons\_27, MenE\_54, Mithril\_40, MmasiCarm\_43, Mocha12\_30, Mordred\_37, Mortcellus\_42, Morty007\_43, MossRose\_40, MoyaNatalis\_37, Mudslide\_40, Mufasa8\_98, Mulaychimus\_43, NCRodriguez\_54, NHagos\_38, Nanao\_39, Neobush\_35, Neos5\_43, Nigel\_39, Nozo\_43, Nymphadora\_34, ODay\_42, Obutu\_43, Ogotogo\_25, Olivio\_42, Opia\_44, OrangeOswald\_43, Orcanus\_26, OtsoOtso\_26, Periwinkle\_42, Phabuloso\_36, Phaedrus\_41, Phantasmagoria\_44, Phayeta\_44, PhillyJawn\_53, Philly\_42, Phingu\_55, Phistory\_39, PhluffyCoco\_26, Phlyer\_43, Phonegingi\_52, Pickles13\_51, Pine5\_39, Pineda\_28, Pipefish\_45, Polka\_26, Polly\_32, Pollywog\_25, Poster\_39, PrinceCharming\_44, Prince\_40, PrincessTrina\_37, Purky\_30, Purky\_36, QueenPie\_39, Qyrzula\_41, RagingRooster\_43, RavenCo17\_36, RawrgerThat\_41, RayTheFireFly\_38, RedFox\_26, Rem711\_6, Renkei\_39, Rhinoforte\_44, Rinkes\_44, Rita1961\_43, RomaT\_43, Rosebush\_43, RosiePosie\_37, Rubeelu\_32, Sabella\_43, Sahara\_29, Savage\_30, Sbash\_32, Scavito\_37, ScoobySnack\_49, Shambre1\_30, Shatter\_38, ShawBrad\_38, Shenandoah\_43, ShroomBoi\_22, Sisko\_38, Sleepyhead\_33, SlippinJimmy\_43, Sonali\_93, Sour\_43, Spooky\_39, Sproutie\_30, Squiddly\_40, Stinger\_39, Stuck\_40, Suscepit\_35, SwainyDoc\_43, SynergyX\_43, TA17A\_45, TaylorSipt\_26, Tayonia\_35, ThetaBob\_24, Thonko\_43, TimTam\_34, Tinciduntolum\_45, TinyTerror\_43, Toad24\_27, Tophat\_37, TraderJ\_40, Tres\_44, Trumpet\_35, TuertoX\_30, Tydolla\_43, Vasanti\_31, Vic9\_00043, Vincenzo\_41, VioletZ\_41, Violeta\_54, Vulpecula\_25, Waleliano\_40, Warren\_52, West99\_44, Whack\_33, Whiteclaw\_30, Whitney\_42, WileyE\_25, Winchester007\_68, Wooper\_40, Xincheng\_39, Yago84\_38, Yahalom\_43, Yeshua\_40, Yinz\_43, Yoshi\_28, Zameen\_35, Zemanar\_41, Zenteno07\_48, phiAsp2\_39,

### Summary by start number:

#### Start 40:

- Found in 2 of 682 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 586
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Mufasa8\_98 (FG),

#### Start 47:

- Found in 1 of 682 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace\_90 (singleton),

#### Start 48:

- Found in 6 of 682 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 5 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Axumite\_38 (DR), CharlottesWeb\_38 (DR), Fresco\_38 (DR), Ligma\_38 (DR), Mariokart\_38 (DR), Shatter\_38 (DR),

Start 51:

- Found in 2 of 682 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 2 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Maruru\_94 (FG), Sonali\_93 (FG),

Start 52:

- Found in 22 of 682 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 9 of 586
- Called 81.8% of time when present
- Phage (with cluster) where this start called: Appa\_52 (GA), Blett\_52 (GA), Bush\_53 (GA), Carrillo\_54 (GA), CookieDog\_52 (GA), Dropshot\_52 (GA), Guzman\_52 (GA), Jakelyne\_55 (GA), Mariel\_55 (GA), MenE\_54 (GA), NCRodriguez\_54 (GA), PhillyJawn\_53 (GA), Phingu\_55 (GA), Phonegingi\_52 (GA), Pickles13\_51 (GA), Violeta\_54 (GA), Warren\_52 (GA), Winchester007\_68 (GA),

Start 53:

- Found in 7 of 682 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 5 of 586
- Called 85.7% of time when present
- Phage (with cluster) where this start called: AnClar\_39 (DR), BiggityBass\_38 (DR), BobRoss2024\_37 (DR), LittleMunchkin\_40 (DR), Sisko\_38 (DR), Yago84\_38 (DR),

Start 56:

- Found in 71 of 682 ( 10.4% ) of genes in pham
- Manual Annotations of this start: 59 of 586
- Called 97.2% of time when present
- Phage (with cluster) where this start called: Abinghost\_43 (B3), Akoma\_43 (B3), AksarBAT\_38 (DR), AnarQue\_40 (DR), Athena\_44 (B3), Audrey\_43 (B3), Baloo\_43 (B3), Ben11\_42 (B3), Bernardo\_44 (B3), Blackpen\_40 (DR), Briakila\_44 (B3), CaiB\_40 (DR), Casbah\_42 (B3), ChaChing\_43 (B3), Chalmers\_43 (B3), Chandler\_43 (B3), Chentzyk\_43 (B3), CloverMinnie\_40 (DR), Compostia\_44 (B3), Corofin\_43 (B3), Daisy\_43 (B3), Deenasa\_43 (B3), Devonte\_43 (B3), FelixTres\_40 (DR), Gadjet\_44 (B3), Gervas\_43 (B3), GlenHope\_44 (B3), Glubnar\_44 (B3), Halfpint\_42 (B3), HarveySr\_43 (B3), Heathcliff\_43 (B3), Jackstina\_40 (B3), Kamiyu\_43 (B3), Kronus\_42 (B3), LestyG\_43 (B3), MakoManhole\_40 (DR), Marley1013\_43 (B3), Marlia\_43 (B3), MmasiCarm\_43 (B3), Mortcellus\_42 (B3), Morty007\_43 (B3), MossRose\_40 (DR), Mulaychimus\_43 (B3), NHagos\_38 (DR), Neos5\_43 (B3), Nozo\_43 (B3), Obutu\_43 (B3), Olivio\_42 (B3), OrangeOswald\_43 (B3), Phaedrus\_41 (B3), Phayeta\_44 (B3), Philly\_42 (B3), Phlyer\_43 (B3), Pipefish\_45 (B3), RagingRooster\_43 (B3), Rita1961\_43 (B3), RomaT\_43 (B3), Shenandoah\_43 (B3), SlippinJimmy\_43 (B3), Sour\_43 (DR), SwainyDoc\_43 (B3), SynergyX\_43 (B3), TinyTerror\_43 (B3), TraderJ\_40 (DR), Tydolla\_43 (B3), Wooper\_40 (DR), Yahalom\_43 (B3), Yeshua\_40 (DR), Yinz\_43 (B3),

Start 58:

- Found in 22 of 682 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 2 of 586
- Called 13.6% of time when present
- Phage (with cluster) where this start called: Antuna\_54 (GA), Losacky\_54 (GA), ScoobySnack\_49 (GA),

Start 59:

- Found in 13 of 682 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 1 of 586
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Purky\_36 (P6),

Start 62:

- Found in 2 of 682 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bumble\_69 (FH), phiAsp2\_39 (singleton),

Start 64:

- Found in 4 of 682 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 3 of 586
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Coldpizza\_41 (DR), Evaa\_38 (DR), Thonko\_43 (B8),

Start 66:

- Found in 346 of 682 ( 50.7% ) of genes in pham
- Manual Annotations of this start: 303 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC\_037 (B6), 40BC\_037 (B6), ABU\_45 (B1), AbsoluteMadLad\_44 (B1), Acadian\_44 (B5), Adriana\_45 (B1), Aelin\_44 (B1), Aleia\_45 (B1), AltPhacts\_45 (B1), Altwerkus\_44 (B1), Anderson\_45 (B1), Andre\_45 (B1), AngelCake\_45 (B1), Antonia\_44 (B1), Aonishiki\_46 (B1), Apizium\_44 (B1), Ashraf\_44 (B1), Badfish\_45 (B1), Bae\_43 (B5), Banjo\_44 (B1), Basato\_46 (B1), BatteryCK\_44 (B1), Beaglebox\_44 (B1), Bishoperium\_44 (B1), BlackStallion\_45 (B1), Blackberry\_44 (B1), BlueHusk\_45 (B1), Bluephacebaby\_44 (B1), Boehler\_45 (B1), BoogieWoogie\_44 (B1), Brilliant\_45 (B1), Buckeye\_45 (B1), Burr\_44 (B1), CRB2\_46 (B9), CamL\_45 (B1), CampRoach\_45 (B1), Cannibal\_45 (B1), Carthage\_43 (B1), Caspiboi\_44 (B1), Chaelin\_45 (B1), Chah\_46 (B1), Charles1\_45 (B1), CharlieGBrown\_44 (B1), CheetO\_45 (B1), Cher\_44 (B1), Childish\_44 (B1), Chipette\_46 (B1), Chorkpop\_45 (B1), Chuni\_44 (B1), Chunky\_45 (B1), Chute\_44 (B1), Cobra\_45 (B1), Colbert\_45 (B1), Coletti\_45 (B1), Cornbread\_44 (B1), Cornobble\_44 (B1), Cosmolli16\_44 (B1), Craff\_45 (B1), Crownjwl\_45 (B1), DaddyDaniels\_45 (B1), Daffy\_45 (B1), Daka\_46 (B1), Dati\_45 (B1), DelRivs\_44 (B1), Derpp\_44 (B1), Dice\_44 (B1), DigitDog\_43 (B5), Dingo\_45 (B1), Dione\_44 (B1), DirtJuice\_45 (B1), Doddsville\_45 (B1), DoesntMatter\_44 (B1), DolOn\_46 (B1), DonSanchon\_44 (B1), Donny\_44 (B5), DuchessDung\_43 (B1), Duggie\_44 (B1), Durga\_45 (B1), EastView9101\_42 (B5), ElvisPhasley\_45 (B1), Emiris\_45 (B1), EmpTee\_45 (B1), Eremos\_45 (B1), Etaye\_45 (B1), Eugenia\_45 (B1), Fang\_45 (B1), Flake\_46 (B1), FleetyMac\_45 (B1), FluffyNinja\_45 (B1), ForDig\_37 (B6), Fozzie\_44 (B1), Frankicide\_45 (B1), FremontTroll\_45 (B1), Freya\_44 (B1), FriarPreacher\_44 (B1), Fringe\_45 (B1), FugateOSU\_44 (B1), Funsized\_46 (B9), Gareth\_44 (B1), GeneCoco\_45 (B1), Giraffe\_45 (B1), Gophee\_45 (B1), Grand2040\_44 (B1), GreenChile\_45 (B1), Gwennie1\_45 (B1), Gwilliam\_45 (B1), Gyarad\_0045 (B1), HSavage\_45 (B1), Haimas\_45 (B1), Haleema\_44 (B1), Hamish\_45 (B1), Happabalu\_45 (B1), Hartsy\_45 (B1), Harvey\_45 (B1), Hekos\_42 (B1), Held\_45 (B1), HenryJackson\_44 (B1), Hertubise\_45 (B1), Hetaeria\_45 (B1), HighStump\_44 (B1), Hocus\_44 (B1), HogWash\_45 (B1), Horchata\_45 (B1), Hosp\_035 (B6),

ImtiyazSitla\_44 (B1), Imvubu\_36 (B10), Inchworm\_45 (B1), Indlovu\_42 (B11), Inverness\_45 (B1), Iridessa\_45 (B1), Iridoclysis\_45 (B1), IsaacEli\_45 (B1), JDog\_44 (B1), JacAttac\_45 (B1), JakeO\_44 (B1), JangoPhett\_45 (B1), Jesabah\_45 (B1), Jillium\_44 (B1), Jiminy\_44 (B1), Jiraiya\_44 (B1), Jolie1\_037 (B6), KLucky39\_45 (B1), Kahve\_44 (B1), Kailash\_45 (B1), KarasumaRum\_45 (B5), Karn\_44 (B1), Katniss\_45 (B1), KayaCho\_37 (B6), Keitherie\_45 (B1), Khan1\_45 (B1), Kikipoo\_45 (B1), Kimbrough\_45 (B1), KingTut\_36 (B1), KingVeVeVe\_45 (B1), KlimbOn\_45 (B1), Kloppinator\_45 (B1), Knocker\_45 (B9), Kwadwo\_44 (B1), Kwksand96\_44 (B1), Labeouficaum\_44 (B1), Larson\_46 (B1), LasagnaCat\_45 (B1), Lasso\_45 (B1), LeeLot\_45 (B1), Lego3393\_44 (B1), Legolas\_44 (B1), Lehmann\_45 (B1), LeiMonet\_45 (B1), LemonSlice\_45 (B1), LilMcDreamy\_41 (B12), Longacauda\_44 (B1), Lopsy\_44 (B1), LostAndPhound\_44 (B1), LuckyMarjie\_44 (B1), Lulumae\_44 (B1), Lulwa\_45 (B1), Lumine\_44 (B1), MRabcd\_44 (B1), Mag7\_44 (B1), Magic8\_45 (B1), Mana\_44 (B1), Manad\_44 (B1), Maru\_44 (B1), Maskar\_44 (B1), Matalotodo\_45 (B1), Mcshane\_44 (B1), Mecca\_44 (B1), Megamind20\_45 (B1), Megatron\_45 (B1), Melc17\_45 (B1), MelsMeow\_44 (B1), Mesh1\_45 (B1), Mesmerelda\_44 (B1), MichaelPhcott\_44 (B1), Mikota\_45 (B1), MiniBoss\_45 (B1), MitKao\_45 (B1), Morgushi\_45 (B1), Morty\_45 (B1), Mosaic\_44 (B1), MrPhizzler\_45 (B1), Mulan\_44 (B1), Murdoc\_45 (B1), Mutante\_44 (B1), Mysterious\_43 (B5), Nacho\_0045 (B1), Nangang\_43 (B5), Nathan\_45 (B1), Nehemiah\_43 (B5), Newman\_45 (B1), Nicole21\_45 (B1), Numberten\_45 (B1), Nyala\_44 (B1), OSmaximus\_45 (B1), Olak\_44 (B1), Oline\_44 (B1), Olive\_45 (B1), OliverWalter\_45 (B1), Omniscient\_45 (B1), OneBrain\_46 (B1), Oosterbaan\_45 (B1), Orfeu\_44 (B1), Orion\_45 (B1), Orwigg\_44 (B1), PG1\_45 (B1), Pacifista\_44 (B1), PallasAthena\_45 (B1), PenguinLover67\_46 (B9), Phamished\_45 (B1), Phareon\_45 (B1), PhatCats2014\_45 (B1), PhatLouie\_45 (B1), Phelemich\_43 (B5), PhenghisKhan\_44 (B1), Pherdinand\_45 (B1), Phergie\_44 (B1), Phipps\_45 (B1), Phleuron\_44 (B1), PhrankReynolds\_43 (B1), PhrodoBaggins\_44 (B1), Phunky\_45 (B1), Piglet\_0044 (B1), PinheadLarry\_45 (B1), Pinkman\_44 (B1), Pipsqueak\_45 (B1), Placalicious\_44 (B1), Plata\_45 (B1), Plmatters\_45 (B1), Podrick\_45 (B1), Pops\_45 (B1), Potter\_44 (B1), Prickles\_45 (B1), ProfessorX\_45 (B1), Puhltonio\_45 (B1), QueenBeane\_45 (B1), Quesadilla\_46 (B9), Quisquillae\_45 (B1), Reccee\_45 (B5), RedMaple\_44 (B1), RedRaider89\_46 (B1), Reprobate\_44 (B5), Rich\_42 (B5), Ricotta\_44 (B1), Riggan\_45 (B1), Rimu\_45 (B1), Rita130\_44 (B5), Riverton\_44 (B1), Robyn\_44 (B1), Roliet\_45 (B1), Roscoe\_46 (B1), Roy17\_45 (B1), SDcharge11\_45 (B1), Saguaro\_45 (B7), SallyH\_45 (B1), Samaymay\_45 (B1), SassyCat97\_44 (B1), Schadenfreude\_44 (B1), Schueller\_44 (B1), Scoot17C\_45 (B1), Scrick\_45 (B1), Selr12\_45 (B1), Serendipitous\_43 (B5), Serendipity\_45 (B1), Serpentine\_0045 (B1), ShadowBud\_45 (B1), Sheila\_45 (B1), Shenyu\_43 (B5), ShiVal\_45 (B1), Sigman\_45 (B1), SilverBell\_45 (B1), Simielle\_44 (B1), SirBeauregard\_45 (B1), SirJeffery\_44 (B5), Skippy\_45 (B1), Slatt\_45 (B1), Soile\_45 (B1), Solosis\_44 (B1), Sophia\_44 (B1), Soto\_45 (B1), Spartan300\_45 (B1), Squid\_45 (B1), Squiggle\_45 (B1), StinkyVeggy\_45 (B5), Struggle\_44 (B1), Suffolk\_45 (B1), Suigeneris\_44 (B5), Surely\_45 (B1), Swiphy\_45 (B1), Swish\_45 (B1), TallGrassMM\_45 (B1), Telesworld\_44 (B1), Thora\_45 (B1), ThreeOh3D2\_45 (B1), Thunderbird\_44 (B1), Timmi\_44 (B1), TomBombadil\_45 (B1), Tomlarah\_45 (B1), Toni\_44 (B1), TooFast2Furius\_47 (B1), Tooj\_45 (B1), Triad\_45 (B1), True\_44 (B1), Trypo\_45 (B1), TyrionL\_44 (B1), UAch1\_45 (B1), UncleHowie\_45 (B1), Usavi\_45 (B1), Vaishali24\_44 (B1), Valjean\_45 (B1), Vaticameos\_41 (B1), Veritas\_44 (B1), Virapocalypse\_45 (B1), Virgeve\_44 (B1), Vista\_45 (B1), Vivaldi\_45 (B1), Vortex\_45 (B1), Wallhey\_44 (B1), Waterdiva\_45 (B1), Weher20\_45 (B1), Windsor\_44 (B1), Xavier\_44 (B1), Yoshand\_45 (B1), YouGoGlencoco\_45 (B1), Zaider\_46 (B1), Zelda\_45 (B1), Zonia\_45 (B1),

Start 67:

- Found in 45 of 682 ( 6.6% ) of genes in pham
- Manual Annotations of this start: 26 of 586
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Ahwei\_39 (B4), AlanGrant\_42 (B4), Antihero\_39 (B4), Apex\_41 (B4), Austelle\_41 (B4), BobbyK\_41 (B4), BrownCNA\_42 (B4), ChrisnMich\_40 (B4), Cooper\_41 (B4), Epah\_39 (B4), Fanaw\_39 (B4), Fortunato\_41 (B4), Frederick\_41 (B4), GinPorsche\_40 (B4), Hally898\_39 (B4), Hangman\_40 (B4), Heath\_39 (B4), Hydro\_40 (B4), JAMaL\_40 (B4), JaguarMi\_40 (B4), JoyceMaria\_40 (B4), Lambano\_39 (B4), LittleDigger\_39 (B4), Lolalove\_40 (B4), Magpie\_39 (B4), Mithril\_40 (B4), Mudslide\_40 (B4), Nanao\_39 (B4), Nigel\_39 (B4), Poster\_39 (B4), Prince\_40 (B4), QueenPie\_39 (B4), RawrgerThat\_41 (B4), Renkei\_39 (B4), Stinger\_39 (B4), Vincenzo\_41 (B4), VioletZ\_41 (B4), Waleliano\_40 (B4), Xincheng\_39 (B4), Zemanar\_41 (B4),

Start 68:

- Found in 5 of 682 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 3 of 586
- Called 80.0% of time when present
- Phage (with cluster) where this start called: BirdsNest\_46 (B13), Hashim76\_46 (B13), LittleMinkey\_49 (B13), Zenteno07\_48 (B13),

Start 69:

- Found in 15 of 682 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 13 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clap\_30 (CZ2), Cynthia\_30 (CZ2), Ebert\_31 (CZ2), GemG\_30 (CZ2), Gizermo\_30 (CZ2), Haley23\_30 (CZ2), Jalleen\_30 (CZ2), Mocha12\_30 (CZ2), Pine5\_39 (singleton), Sahara\_29 (CZ2), Savage\_30 (CZ2), Sproutie\_30 (CZ2), TuertoX\_30 (CZ2), Vasanti\_31 (CZ2), Whiteclaw\_30 (CZ2),

Start 70:

- Found in 8 of 682 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 3 of 586
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Shambre1\_30 (singleton), Spooky\_39 (DN2), Squiddly\_40 (DN2),

Start 71:

- Found in 54 of 682 ( 7.9% ) of genes in pham
- Manual Annotations of this start: 45 of 586
- Called 85.2% of time when present
- Phage (with cluster) where this start called: Allegro\_44 (B2), Ares\_44 (B2), Avani\_28 (F2), Bananafish\_44 (B2), Bipolar\_22 (F1), Blocker23\_44 (B2), Boyle\_44 (B2), Brownie5\_44 (B2), Calamitous\_44 (B2), Che9d\_28 (F2), Coffee\_44 (B2), Demsculpinboyz\_28 (F2), Eaglehorse\_44 (B2), Faze9\_43 (B2), FrenchFry\_44 (B2), Glass\_44 (B2), Godines\_44 (B2), Hedgerow\_44 (B2), Holeinone\_44 (B2), ItsyBitsy1\_44 (B2), Kaleb\_44 (B2), Kenuha5\_22 (F1), Kersh\_23 (F1), Kheth\_44 (B2), Kolhan\_44 (B2), Lars\_44 (B2), Laurie\_43 (B2), Lephleur\_44 (B2), LilSmirk\_44 (B2), LizLemon\_44 (B2), MasterPo\_44 (B2), Ogopogo\_25 (F1), Opia\_44 (B2), Phantasmagoria\_44 (B2), Pollywog\_25 (F1), PrinceCharming\_44 (B2), Rhinoforte\_44 (B2), Rinkes\_44 (B9), Sabella\_43 (B2), ShroomBoi\_22 (F1), TA17A\_45 (B2),

Tincidunt\_solum\_45 (B2), Tres\_44 (B2), Vic9\_00043 (B2), West99\_44 (B2), Yoshi\_28 (F2),

Start 73:

- Found in 48 of 682 ( 7.0% ) of genes in pham
- Manual Annotations of this start: 37 of 586
- Called 83.3% of time when present
- Phage (with cluster) where this start called: 32HC\_7 (Z), Antonio\_35 (CZ1), Asapag\_39 (DN1), BatStarr\_34 (CZ1), BearBQ\_38 (DN), BeeGee\_38 (CY5), Bosnia\_34 (CZ1), Budski\_39 (DN), CheeseTouch\_37 (DN1), Ecliptus\_40 (DN), Eudoria\_35 (CZ1), Eviarto\_34 (CZ1), Getalong\_40 (DN1), Herod\_34 (CZ1), Holliday\_38 (DN1), Horus\_39 (DN1), Kenna\_38 (DN1), Kita\_36 (CZ1), Leroy\_39 (DN1), Lukepolites\_69 (singleton), Lutum\_39 (DN1), Manasvini\_35 (CZ1), Maridalia\_34 (CZ1), Neobush\_35 (CZ1), Nymphadora\_34 (CZ1), ODay\_42 (DN), Periwinkle\_42 (DN1), Phabuloso\_36 (DN1), Polly\_32 (CZ1), RavenCo17\_36 (CZ8), Rem711\_6 (Z), ShawBrad\_38 (DN1), Sleepyhead\_33 (singleton), Suscepit\_35 (CZ1), Tayonia\_35 (CZ1), TimTam\_34 (CZ1), Trumpet\_35 (CZ1), Whack\_33 (singleton), Whitney\_42 (DN1), Zameen\_35 (CZ1),

Start 74:

- Found in 5 of 682 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 5 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Brynnie\_25 (AS1), Chickaboom\_25 (AS1), Jamun\_25 (AS1), Vulpecula\_25 (AS1), WileyE\_25 (AS1),

Start 75:

- Found in 22 of 682 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 2 of 586
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Madiba\_23 (F1), ThetaBob\_24 (F4),

Start 76:

- Found in 5 of 682 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 4 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Butters\_32 (N), Purky\_30 (P6), Rubeelu\_32 (N), Sbash\_32 (I2), Stuck\_40 (I2),

Start 77:

- Found in 4 of 682 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 586
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bubbykins\_37 (UNK), LonelyBoi\_35 (CY7),

Start 79:

- Found in 20 of 682 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 19 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipper1996\_370 (AR), Chocolat\_37 (AR), Chubster\_37 (AR), Colucci\_37 (AR), Conboy\_37 (AR), DrYang\_38 (AR), EdgarPoe\_37 (AR), HumptyDumpty\_37 (AR), JaNo\_37 (AR), JayCookie\_37 (AR),

KBurrousTX\_37 (AR), Kabreeze\_37 (AR), Linus\_37 (AR), Lymara\_37 (AR), Mordred\_37 (AR), MoyaNatalis\_37 (AR), PrincessTrina\_37 (AR), RosiePosie\_37 (AR), Scavito\_37 (AR), Tophat\_37 (AR),

Start 80:

- Found in 1 of 682 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Basilisk\_26 (AS1),

Start 82:

- Found in 2 of 682 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 2 of 586
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro\_27 (AS1), Galaxy\_26 (AS1),

Start 85:

- Found in 416 of 682 ( 61.0% ) of genes in pham
- Manual Annotations of this start: 25 of 586
- Called 7.0% of time when present
- Phage (with cluster) where this start called: AlexMinion\_25 (AS3), Amelia\_27 (AS2), Amphitrite\_26 (AS3), Andrew\_28 (AS3), Antrice\_26 (AS2), Atlantica\_26 (AS3), Camara\_26 (AS3), Catfish\_31 (CU5), Colusalem\_27 (AS2), Coral\_26 (AS2), Cote\_27 (AS2), Cygnet\_25 (AS2), DanHam62\_26 (AS3), Daob\_27 (AS2), Glotell\_26 (AS3), HannahPhantana\_27 (AS2), KHumphrey\_26 (AS3), Kuleana\_27 (AS2), Leona\_25 (AS3), Lunar\_27 (AS2), Melons\_27 (AS2), Orcanus\_26 (AS1), OtsoOtso\_26 (AS2), PhluffyCoco\_26 (AS3), Pineda\_28 (AS2), Polka\_26 (AS2), RedFox\_26 (AS3), TaylorSipt\_26 (AS1), Toad24\_27 (AS1),

Start 86:

- Found in 50 of 682 ( 7.3% ) of genes in pham
- Manual Annotations of this start: 3 of 586
- Called 6.0% of time when present
- Phage (with cluster) where this start called: Arbiter\_43 (B2), Qyrzula\_41 (B2), Rosebush\_43 (B2),

Start 92:

- Found in 4 of 682 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 586
- Called 25.0% of time when present
- Phage (with cluster) where this start called: RayTheFireFly\_38 (DB),

Start 93:

- Found in 120 of 682 ( 17.6% ) of genes in pham
- Manual Annotations of this start: 4 of 586
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Apricot\_38 (DN3), BENtherdunthat\_38 (DN1), Crater\_36 (DN3), Frickyeah\_39 (DN1), Hugley\_32 (CZ1), Phistory\_39 (DN1),

### Summary by clusters:

There are 41 clusters represented in this pham: FG, DN, singleton, CZ2, CZ1, DB, CZ8, B12, B13, B10, B11, FH, P6, DR, CU5, UNK, I2, DN1, DN3, DN2, AS3, AS2,

AS1, CY7, CY5, N, AR, GA, Z, F1, F2, F4, B4, B5, B6, B7, B1, B2, B3, B8, B9,

Info for manual annotations of cluster AR:

- Start number 79 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster AS1:

- Start number 74 was manually annotated 5 times for cluster AS1.
- Start number 80 was manually annotated 1 time for cluster AS1.
- Start number 82 was manually annotated 2 times for cluster AS1.
- Start number 85 was manually annotated 3 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 85 was manually annotated 13 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 85 was manually annotated 8 times for cluster AS3.

Info for manual annotations of cluster B1:

- Start number 66 was manually annotated 282 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 66 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 66 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 66 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 68 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 71 was manually annotated 34 times for cluster B2.
- Start number 86 was manually annotated 3 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 56 was manually annotated 50 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 67 was manually annotated 26 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 66 was manually annotated 10 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 66 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster B7:

- Start number 66 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 64 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 66 was manually annotated 5 times for cluster B9.
- Start number 71 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster CU5:

- Start number 85 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CY5:

- Start number 73 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY7:

- Start number 77 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ1:

- Start number 73 was manually annotated 17 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 69 was manually annotated 13 times for cluster CZ2.

Info for manual annotations of cluster CZ8:

- Start number 73 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DB:

- Start number 92 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DN:

- Start number 73 was manually annotated 4 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 73 was manually annotated 11 times for cluster DN1.
- Start number 93 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 70 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 93 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DR:

- Start number 48 was manually annotated 5 times for cluster DR.
- Start number 53 was manually annotated 5 times for cluster DR.
- Start number 56 was manually annotated 9 times for cluster DR.
- Start number 64 was manually annotated 2 times for cluster DR.

Info for manual annotations of cluster F1:

- Start number 71 was manually annotated 6 times for cluster F1.
- Start number 75 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 71 was manually annotated 4 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 75 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster FG:

- Start number 40 was manually annotated 1 time for cluster FG.
- Start number 51 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster FH:

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

Info for manual annotations of cluster GA:

- Start number 52 was manually annotated 9 times for cluster GA.
- Start number 58 was manually annotated 2 times for cluster GA.

Info for manual annotations of cluster I2:

- Start number 76 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

- Start number 76 was manually annotated 2 times for cluster N.

Info for manual annotations of cluster P6:

- Start number 59 was manually annotated 1 time for cluster P6.
- Start number 76 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster Z:

- Start number 73 was manually annotated 1 time for cluster Z.

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

Gene: 32HC\_7 Start: 3414, Stop: 3172, Start Num: 73

Candidate Starts for 32HC\_7:

(Start: 68 @3423 has 3 MA's), (Start: 73 @3414 has 37 MA's), (91, 3384), (113, 3291), (117, 3273),

Gene: 39HC\_037 Start: 36987, Stop: 36790, Start Num: 66

Candidate Starts for 39HC\_037:

(Start: 66 @36987 has 303 MA's), (Start: 75 @36975 has 2 MA's), (Start: 93 @36948 has 4 MA's), (97, 36930), (111, 36897),

Gene: 40BC\_037 Start: 36987, Stop: 36790, Start Num: 66

Candidate Starts for 40BC\_037:

(Start: 66 @36987 has 303 MA's), (Start: 75 @36975 has 2 MA's), (Start: 93 @36948 has 4 MA's), (97, 36930), (111, 36897),

Gene: ABU\_45 Start: 39190, Stop: 38975, Start Num: 66

Candidate Starts for ABU\_45:

(25, 39292), (Start: 66 @39190 has 303 MA's), (Start: 85 @39160 has 25 MA's), (97, 39115),

Gene: Abidatro\_27 Start: 19710, Stop: 19528, Start Num: 82

Candidate Starts for Abidatro\_27:

(57, 19749), (Start: 82 @19710 has 2 MA's),

Gene: Abinghost\_43 Start: 39027, Stop: 38791, Start Num: 56  
Candidate Starts for Abinghost\_43:  
(Start: 56 @39027 has 59 MA's), (88, 38970), (107, 38904), (111, 38898),

Gene: AbsoluteMadLad\_44 Start: 39199, Stop: 38984, Start Num: 66  
Candidate Starts for AbsoluteMadLad\_44:  
(Start: 66 @39199 has 303 MA's), (Start: 85 @39169 has 25 MA's), (97, 39124),

Gene: Acadian\_44 Start: 39648, Stop: 39439, Start Num: 66  
Candidate Starts for Acadian\_44:  
(24, 39762), (25, 39756), (Start: 66 @39648 has 303 MA's), (Start: 85 @39633 has 25 MA's), (91, 39621), (97, 39588),

Gene: Adriana\_45 Start: 39188, Stop: 38973, Start Num: 66  
Candidate Starts for Adriana\_45:  
(25, 39290), (Start: 66 @39188 has 303 MA's), (Start: 85 @39158 has 25 MA's), (97, 39113),

Gene: Aelin\_44 Start: 38754, Stop: 38539, Start Num: 66  
Candidate Starts for Aelin\_44:  
(25, 38856), (Start: 66 @38754 has 303 MA's), (Start: 85 @38724 has 25 MA's), (97, 38679),

Gene: Ahwei\_39 Start: 38171, Stop: 37965, Start Num: 67  
Candidate Starts for Ahwei\_39:  
(Start: 67 @38171 has 26 MA's), (Start: 85 @38150 has 25 MA's), (Start: 93 @38123 has 4 MA's), (97, 38105), (104, 38087), (114, 38057), (116, 38051), (121, 38030),

Gene: Akoma\_43 Start: 39031, Stop: 38795, Start Num: 56  
Candidate Starts for Akoma\_43:  
(Start: 56 @39031 has 59 MA's), (88, 38974), (107, 38908), (111, 38902),

Gene: AksarBAT\_38 Start: 33442, Stop: 33182, Start Num: 56  
Candidate Starts for AksarBAT\_38:  
(34, 33475), (Start: 56 @33442 has 59 MA's), (Start: 85 @33400 has 25 MA's), (Start: 86 @33397 has 3 MA's), (99, 33346), (107, 33328), (116, 33301),

Gene: AlanGrant\_42 Start: 39951, Stop: 39745, Start Num: 67  
Candidate Starts for AlanGrant\_42:  
(Start: 67 @39951 has 26 MA's), (Start: 85 @39930 has 25 MA's), (88, 39924), (Start: 93 @39903 has 4 MA's), (97, 39885), (99, 39876), (104, 39867), (114, 39837), (115, 39834), (116, 39831),

Gene: Aleia\_45 Start: 38768, Stop: 38553, Start Num: 66  
Candidate Starts for Aleia\_45:  
(Start: 66 @38768 has 303 MA's), (Start: 85 @38738 has 25 MA's), (97, 38693), (111, 38660),

Gene: AlexMinion\_25 Start: 18294, Stop: 18103, Start Num: 85  
Candidate Starts for AlexMinion\_25:  
(16, 18519), (23, 18441), (26, 18429), (78, 18306), (Start: 85 @18294 has 25 MA's),

Gene: Allegro\_44 Start: 39432, Stop: 39226, Start Num: 71  
Candidate Starts for Allegro\_44:  
(Start: 71 @39432 has 45 MA's), (Start: 86 @39405 has 3 MA's), (88, 39402), (104, 39348), (115, 39315),

Gene: AltPhacts\_45 Start: 39177, Stop: 38962, Start Num: 66  
Candidate Starts for AltPhacts\_45:  
(25, 39279), (Start: 66 @39177 has 303 MA's), (Start: 85 @39147 has 25 MA's), (97, 39102),

Gene: Altwerkus\_44 Start: 38878, Stop: 38663, Start Num: 66  
Candidate Starts for Altwerkus\_44:  
(Start: 66 @38878 has 303 MA's), (Start: 85 @38848 has 25 MA's), (97, 38803),

Gene: Amelia\_27 Start: 19057, Stop: 18836, Start Num: 85  
Candidate Starts for Amelia\_27:  
(Start: 85 @19057 has 25 MA's),

Gene: Amphitrite\_26 Start: 18730, Stop: 18515, Start Num: 85  
Candidate Starts for Amphitrite\_26:  
(Start: 85 @18730 has 25 MA's),

Gene: AnClar\_39 Start: 35606, Stop: 35379, Start Num: 53  
Candidate Starts for AnClar\_39:  
(Start: 53 @35606 has 5 MA's), (108, 35489), (125, 35420),

Gene: AnarQue\_40 Start: 34838, Stop: 34584, Start Num: 56  
Candidate Starts for AnarQue\_40:  
(31, 34880), (Start: 56 @34838 has 59 MA's), (Start: 86 @34790 has 3 MA's), (99, 34739), (107, 34721), (116, 34694),

Gene: Anderson\_45 Start: 39183, Stop: 38968, Start Num: 66  
Candidate Starts for Anderson\_45:  
(25, 39285), (Start: 66 @39183 has 303 MA's), (Start: 85 @39153 has 25 MA's), (97, 39108),

Gene: Andre\_45 Start: 39182, Stop: 38967, Start Num: 66  
Candidate Starts for Andre\_45:  
(Start: 66 @39182 has 303 MA's), (Start: 85 @39152 has 25 MA's), (97, 39107), (111, 39074),

Gene: Andrew\_28 Start: 19161, Stop: 18955, Start Num: 85  
Candidate Starts for Andrew\_28:  
(Start: 85 @19161 has 25 MA's),

Gene: AngelCake\_45 Start: 39202, Stop: 38987, Start Num: 66  
Candidate Starts for AngelCake\_45:  
(Start: 66 @39202 has 303 MA's), (Start: 85 @39172 has 25 MA's), (97, 39127),

Gene: Antihero\_39 Start: 38171, Stop: 37965, Start Num: 67  
Candidate Starts for Antihero\_39:  
(Start: 67 @38171 has 26 MA's), (Start: 85 @38150 has 25 MA's), (Start: 93 @38123 has 4 MA's), (97, 38105), (104, 38087), (114, 38057), (116, 38051), (121, 38030),

Gene: Antonia\_44 Start: 38754, Stop: 38539, Start Num: 66  
Candidate Starts for Antonia\_44:  
(25, 38856), (Start: 66 @38754 has 303 MA's), (Start: 85 @38724 has 25 MA's), (97, 38679),

Gene: Antonio\_35 Start: 29354, Stop: 29118, Start Num: 73  
Candidate Starts for Antonio\_35:

(Start: 73 @29354 has 37 MA's), (Start: 93 @29312 has 4 MA's), (98, 29291), (110, 29249), (119, 29201), (130, 29129),

Gene: Antrice\_26 Start: 19359, Stop: 19168, Start Num: 85  
Candidate Starts for Antrice\_26:  
(36, 19434), (37, 19431), (Start: 85 @19359 has 25 MA's),

Gene: Antuna\_54 Start: 32652, Stop: 32918, Start Num: 58  
Candidate Starts for Antuna\_54:  
(20, 32508), (Start: 52 @32643 has 9 MA's), (Start: 58 @32652 has 2 MA's), (89, 32709), (94, 32733), (96, 32739), (120, 32832),

Gene: Aonishiki\_46 Start: 39226, Stop: 39011, Start Num: 66  
Candidate Starts for Aonishiki\_46:  
(25, 39328), (Start: 66 @39226 has 303 MA's), (Start: 85 @39196 has 25 MA's), (97, 39151),

Gene: Apex\_41 Start: 39377, Stop: 39171, Start Num: 67  
Candidate Starts for Apex\_41:  
(Start: 67 @39377 has 26 MA's), (Start: 85 @39356 has 25 MA's), (Start: 93 @39329 has 4 MA's), (97, 39311), (104, 39293), (114, 39263), (116, 39257),

Gene: Apizium\_44 Start: 38943, Stop: 38728, Start Num: 66  
Candidate Starts for Apizium\_44:  
(Start: 66 @38943 has 303 MA's), (Start: 85 @38913 has 25 MA's), (97, 38868), (111, 38835),

Gene: Appa\_52 Start: 32408, Stop: 32683, Start Num: 52  
Candidate Starts for Appa\_52:  
(6, 32012), (8, 32087), (20, 32273), (Start: 52 @32408 has 9 MA's), (Start: 58 @32417 has 2 MA's), (89, 32474), (94, 32498), (96, 32504), (120, 32597),

Gene: Apricot\_38 Start: 28904, Stop: 28710, Start Num: 93  
Candidate Starts for Apricot\_38:  
(Start: 73 @28946 has 37 MA's), (Start: 93 @28904 has 4 MA's), (98, 28883), (110, 28841), (119, 28793),

Gene: Arbiter\_43 Start: 39491, Stop: 39312, Start Num: 86  
Candidate Starts for Arbiter\_43:  
(Start: 71 @39518 has 45 MA's), (Start: 86 @39491 has 3 MA's), (88, 39488), (104, 39434), (115, 39401),

Gene: Ares\_44 Start: 39502, Stop: 39296, Start Num: 71  
Candidate Starts for Ares\_44:  
(Start: 71 @39502 has 45 MA's), (Start: 86 @39475 has 3 MA's), (88, 39472), (104, 39418), (115, 39385),

Gene: Asapag\_39 Start: 30538, Stop: 30302, Start Num: 73  
Candidate Starts for Asapag\_39:  
(Start: 73 @30538 has 37 MA's), (Start: 93 @30496 has 4 MA's), (98, 30475), (110, 30433), (119, 30385),

Gene: Ashraf\_44 Start: 38747, Stop: 38532, Start Num: 66  
Candidate Starts for Ashraf\_44:  
(Start: 66 @38747 has 303 MA's), (Start: 85 @38717 has 25 MA's), (97, 38672), (111, 38639),

Gene: Athena\_44 Start: 39778, Stop: 39542, Start Num: 56  
Candidate Starts for Athena\_44:  
(Start: 56 @39778 has 59 MA's), (88, 39721), (107, 39655), (111, 39649),

Gene: Atlantica\_26 Start: 18732, Stop: 18517, Start Num: 85  
Candidate Starts for Atlantica\_26:  
(Start: 85 @18732 has 25 MA's),

Gene: Audrey\_43 Start: 39027, Stop: 38791, Start Num: 56  
Candidate Starts for Audrey\_43:  
(Start: 56 @39027 has 59 MA's), (88, 38970), (107, 38904), (111, 38898),

Gene: Austelle\_41 Start: 39833, Stop: 39627, Start Num: 67  
Candidate Starts for Austelle\_41:  
(Start: 67 @39833 has 26 MA's), (Start: 85 @39812 has 25 MA's), (Start: 93 @39785 has 4 MA's), (97, 39767), (104, 39749), (114, 39719), (116, 39713),

Gene: Avani\_28 Start: 24082, Stop: 23903, Start Num: 71  
Candidate Starts for Avani\_28:  
(Start: 59 @24106 has 1 MA's), (Start: 71 @24082 has 45 MA's), (Start: 75 @24076 has 2 MA's), (91, 24064), (Start: 93 @24049 has 4 MA's), (103, 24016), (125, 23920),

Gene: Axumite\_38 Start: 32837, Stop: 32601, Start Num: 48  
Candidate Starts for Axumite\_38:  
(46, 32840), (Start: 48 @32837 has 5 MA's), (63, 32816), (Start: 67 @32810 has 26 MA's), (83, 32786), (88, 32780), (115, 32690),

Gene: BENtherdunthat\_38 Start: 28707, Stop: 28513, Start Num: 93  
Candidate Starts for BENtherdunthat\_38:  
(Start: 73 @28749 has 37 MA's), (Start: 93 @28707 has 4 MA's), (98, 28686), (110, 28644), (119, 28596),

Gene: Badfish\_45 Start: 39213, Stop: 38998, Start Num: 66  
Candidate Starts for Badfish\_45:  
(25, 39315), (Start: 66 @39213 has 303 MA's), (Start: 85 @39183 has 25 MA's), (97, 39138),

Gene: Bae\_43 Start: 39550, Stop: 39341, Start Num: 66  
Candidate Starts for Bae\_43:  
(Start: 66 @39550 has 303 MA's), (Start: 85 @39535 has 25 MA's), (91, 39523), (97, 39490), (111, 39457),

Gene: Baloo\_43 Start: 39030, Stop: 38794, Start Num: 56  
Candidate Starts for Baloo\_43:  
(Start: 56 @39030 has 59 MA's), (88, 38973), (107, 38907), (111, 38901),

Gene: Bananafish\_44 Start: 39438, Stop: 39232, Start Num: 71  
Candidate Starts for Bananafish\_44:  
(Start: 71 @39438 has 45 MA's), (Start: 86 @39411 has 3 MA's), (88, 39408), (104, 39354), (115, 39321),

Gene: Banjo\_44 Start: 38888, Stop: 38673, Start Num: 66  
Candidate Starts for Banjo\_44:

(Start: 66 @38888 has 303 MA's), (Start: 85 @38858 has 25 MA's), (97, 38813), (111, 38780),

Gene: Basato\_46 Start: 39467, Stop: 39252, Start Num: 66

Candidate Starts for Basato\_46:

(Start: 66 @39467 has 303 MA's), (Start: 85 @39437 has 25 MA's), (97, 39392),

Gene: Basilisk\_26 Start: 20189, Stop: 19986, Start Num: 80

Candidate Starts for Basilisk\_26:

(Start: 80 @20189 has 1 MA's),

Gene: BatStarr\_34 Start: 29521, Stop: 29285, Start Num: 73

Candidate Starts for BatStarr\_34:

(Start: 73 @29521 has 37 MA's), (Start: 93 @29479 has 4 MA's), (110, 29416), (119, 29368), (121, 29356),

Gene: BatteryCK\_44 Start: 38807, Stop: 38592, Start Num: 66

Candidate Starts for BatteryCK\_44:

(Start: 66 @38807 has 303 MA's), (Start: 85 @38777 has 25 MA's), (97, 38732),

Gene: Beaglebox\_44 Start: 38909, Stop: 38694, Start Num: 66

Candidate Starts for Beaglebox\_44:

(Start: 66 @38909 has 303 MA's), (Start: 85 @38879 has 25 MA's), (97, 38834), (111, 38801),

Gene: BearBQ\_38 Start: 30173, Stop: 29937, Start Num: 73

Candidate Starts for BearBQ\_38:

(Start: 73 @30173 has 37 MA's), (Start: 93 @30131 has 4 MA's), (98, 30110), (110, 30068), (119, 30020),

Gene: BeeGee\_38 Start: 30304, Stop: 30068, Start Num: 73

Candidate Starts for BeeGee\_38:

(Start: 73 @30304 has 37 MA's), (Start: 93 @30262 has 4 MA's), (98, 30241), (110, 30199), (119, 30151),

Gene: Ben11\_42 Start: 38849, Stop: 38613, Start Num: 56

Candidate Starts for Ben11\_42:

(Start: 56 @38849 has 59 MA's), (88, 38792), (107, 38726), (111, 38720),

Gene: Bernardo\_44 Start: 39575, Stop: 39339, Start Num: 56

Candidate Starts for Bernardo\_44:

(Start: 56 @39575 has 59 MA's), (88, 39518), (107, 39452), (111, 39446),

Gene: BiggityBass\_38 Start: 35067, Stop: 34840, Start Num: 53

Candidate Starts for BiggityBass\_38:

(43, 35082), (Start: 53 @35067 has 5 MA's), (108, 34950), (125, 34881),

Gene: Bipolar\_22 Start: 24352, Stop: 24173, Start Num: 71

Candidate Starts for Bipolar\_22:

(Start: 59 @24376 has 1 MA's), (Start: 71 @24352 has 45 MA's), (Start: 75 @24346 has 2 MA's), (Start: 93 @24319 has 4 MA's), (103, 24286), (125, 24190),

Gene: BirdsNest\_46 Start: 37877, Stop: 37662, Start Num: 68

Candidate Starts for BirdsNest\_46:

(Start: 68 @37877 has 3 MA's), (Start: 85 @37853 has 25 MA's), (Start: 93 @37826 has 4 MA's), (99, 37799), (121, 37733), (126, 37703),

Gene: Bishoperium\_44 Start: 38897, Stop: 38682, Start Num: 66

Candidate Starts for Bishoperium\_44:

(25, 38999), (Start: 66 @38897 has 303 MA's), (Start: 85 @38867 has 25 MA's), (97, 38822),

Gene: BlackStallion\_45 Start: 39199, Stop: 38984, Start Num: 66

Candidate Starts for BlackStallion\_45:

(Start: 66 @39199 has 303 MA's), (Start: 85 @39169 has 25 MA's), (97, 39124), (111, 39091),

Gene: Blackpen\_40 Start: 34256, Stop: 34002, Start Num: 56

Candidate Starts for Blackpen\_40:

(31, 34298), (Start: 56 @34256 has 59 MA's), (Start: 86 @34208 has 3 MA's), (99, 34157), (107, 34139), (116, 34112),

Gene: BlacksBerry\_44 Start: 38915, Stop: 38700, Start Num: 66

Candidate Starts for BlacksBerry\_44:

(25, 39017), (Start: 66 @38915 has 303 MA's), (Start: 85 @38885 has 25 MA's), (97, 38840),

Gene: Blett\_52 Start: 32593, Stop: 32868, Start Num: 52

Candidate Starts for Blett\_52:

(4, 32110), (5, 32137), (20, 32458), (Start: 52 @32593 has 9 MA's), (Start: 58 @32602 has 2 MA's), (89, 32659), (94, 32683), (96, 32689), (120, 32782),

Gene: Blocker23\_44 Start: 39556, Stop: 39350, Start Num: 71

Candidate Starts for Blocker23\_44:

(Start: 71 @39556 has 45 MA's), (Start: 86 @39529 has 3 MA's), (88, 39526), (104, 39472), (115, 39439),

Gene: BlueHusk\_45 Start: 38696, Stop: 38481, Start Num: 66

Candidate Starts for BlueHusk\_45:

(Start: 66 @38696 has 303 MA's), (Start: 85 @38666 has 25 MA's), (97, 38621),

Gene: Bluephacebaby\_44 Start: 38894, Stop: 38679, Start Num: 66

Candidate Starts for Bluephacebaby\_44:

(Start: 66 @38894 has 303 MA's), (Start: 85 @38864 has 25 MA's), (97, 38819),

Gene: BobRoss2024\_37 Start: 32952, Stop: 32707, Start Num: 53

Candidate Starts for BobRoss2024\_37:

(31, 32994), (34, 32985), (Start: 53 @32952 has 5 MA's), (Start: 75 @32919 has 2 MA's), (81, 32910), (Start: 85 @32901 has 25 MA's), (99, 32847), (124, 32763),

Gene: BobbyK\_41 Start: 39202, Stop: 38996, Start Num: 67

Candidate Starts for BobbyK\_41:

(Start: 67 @39202 has 26 MA's), (Start: 85 @39181 has 25 MA's), (Start: 93 @39154 has 4 MA's), (97, 39136), (104, 39118), (114, 39088), (116, 39082),

Gene: Boehler\_45 Start: 39200, Stop: 38985, Start Num: 66

Candidate Starts for Boehler\_45:

(25, 39302), (Start: 66 @39200 has 303 MA's), (Start: 85 @39170 has 25 MA's), (97, 39125),

Gene: BoogieWoogie\_44 Start: 38881, Stop: 38666, Start Num: 66

Candidate Starts for BoogieWoogie\_44:

(25, 38983), (Start: 66 @38881 has 303 MA's), (Start: 85 @38851 has 25 MA's), (97, 38806),

Gene: Bosnia\_34 Start: 29521, Stop: 29285, Start Num: 73

Candidate Starts for Bosnia\_34:

(Start: 73 @29521 has 37 MA's), (Start: 93 @29479 has 4 MA's), (110, 29416), (119, 29368), (121, 29356),

Gene: Boyle\_44 Start: 39557, Stop: 39351, Start Num: 71

Candidate Starts for Boyle\_44:

(Start: 71 @39557 has 45 MA's), (Start: 86 @39530 has 3 MA's), (88, 39527), (104, 39473), (115, 39440),

Gene: Briakila\_44 Start: 39797, Stop: 39561, Start Num: 56

Candidate Starts for Briakila\_44:

(Start: 56 @39797 has 59 MA's), (88, 39740), (107, 39674), (111, 39668),

Gene: Brilliant\_45 Start: 38905, Stop: 38690, Start Num: 66

Candidate Starts for Brilliant\_45:

(Start: 66 @38905 has 303 MA's), (Start: 85 @38875 has 25 MA's), (97, 38830), (111, 38797),

Gene: BrownCNA\_42 Start: 39463, Stop: 39257, Start Num: 67

Candidate Starts for BrownCNA\_42:

(Start: 67 @39463 has 26 MA's), (Start: 85 @39442 has 25 MA's), (Start: 93 @39415 has 4 MA's), (97, 39397), (104, 39379), (114, 39349), (116, 39343),

Gene: Brownie5\_44 Start: 39563, Stop: 39357, Start Num: 71

Candidate Starts for Brownie5\_44:

(Start: 71 @39563 has 45 MA's), (Start: 86 @39536 has 3 MA's), (88, 39533), (104, 39479), (115, 39446),

Gene: Brynnie\_25 Start: 19788, Stop: 19591, Start Num: 74

Candidate Starts for Brynnie\_25:

(Start: 74 @19788 has 5 MA's),

Gene: Bubbykins\_37 Start: 28274, Stop: 28059, Start Num: 77

Candidate Starts for Bubbykins\_37:

(27, 28391), (28, 28385), (29, 28382), (30, 28376), (32, 28361), (Start: 40 @28346 has 1 MA's), (Start: 53 @28322 has 5 MA's), (Start: 77 @28274 has 1 MA's), (97, 28214), (105, 28184), (115, 28154), (116, 28151),

Gene: Buckeye\_45 Start: 39217, Stop: 39002, Start Num: 66

Candidate Starts for Buckeye\_45:

(Start: 66 @39217 has 303 MA's), (Start: 85 @39187 has 25 MA's), (97, 39142),

Gene: Budski\_39 Start: 30500, Stop: 30264, Start Num: 73

Candidate Starts for Budski\_39:

(Start: 73 @30500 has 37 MA's), (Start: 93 @30458 has 4 MA's), (98, 30437), (110, 30395), (119, 30347),

Gene: Bumble\_69 Start: 44314, Stop: 44069, Start Num: 62

Candidate Starts for Bumble\_69:

(Start: 62 @44314 has 1 MA's), (125, 44116),

Gene: Burr\_44 Start: 38894, Stop: 38679, Start Num: 66

Candidate Starts for Burr\_44:

(Start: 66 @38894 has 303 MA's), (Start: 85 @38864 has 25 MA's), (97, 38819),

Gene: Bush\_53 Start: 32542, Stop: 32817, Start Num: 52

Candidate Starts for Bush\_53:

(20, 32407), (Start: 52 @32542 has 9 MA's), (Start: 58 @32551 has 2 MA's), (89, 32608), (94, 32632), (96, 32638), (120, 32731),

Gene: Butters\_32 Start: 26751, Stop: 26518, Start Num: 76

Candidate Starts for Butters\_32:

(33, 26826), (35, 26823), (39, 26817), (Start: 70 @26760 has 3 MA's), (Start: 76 @26751 has 4 MA's), (91, 26727), (102, 26679), (119, 26601), (130, 26529),

Gene: CRB2\_46 Start: 41727, Stop: 41521, Start Num: 66

Candidate Starts for CRB2\_46:

(Start: 66 @41727 has 303 MA's), (Start: 85 @41706 has 25 MA's), (97, 41661), (99, 41652), (116, 41607), (126, 41556),

Gene: CaiB\_40 Start: 34824, Stop: 34570, Start Num: 56

Candidate Starts for CaiB\_40:

(31, 34866), (Start: 56 @34824 has 59 MA's), (Start: 86 @34776 has 3 MA's), (99, 34725), (107, 34707), (116, 34680),

Gene: Calamitous\_44 Start: 39443, Stop: 39237, Start Num: 71

Candidate Starts for Calamitous\_44:

(Start: 71 @39443 has 45 MA's), (Start: 86 @39416 has 3 MA's), (88, 39413), (104, 39359), (115, 39326),

Gene: CamL\_45 Start: 39195, Stop: 38980, Start Num: 66

Candidate Starts for CamL\_45:

(Start: 66 @39195 has 303 MA's), (Start: 85 @39165 has 25 MA's), (97, 39120), (111, 39087),

Gene: Camara\_26 Start: 18733, Stop: 18518, Start Num: 85

Candidate Starts for Camara\_26:

(Start: 85 @18733 has 25 MA's),

Gene: CampRoach\_45 Start: 39185, Stop: 38970, Start Num: 66

Candidate Starts for CampRoach\_45:

(25, 39287), (Start: 66 @39185 has 303 MA's), (Start: 85 @39155 has 25 MA's), (97, 39110),

Gene: Cannibal\_45 Start: 39178, Stop: 38963, Start Num: 66

Candidate Starts for Cannibal\_45:

(Start: 66 @39178 has 303 MA's), (Start: 85 @39148 has 25 MA's), (97, 39103), (111, 39070),

Gene: Carrillo\_54 Start: 32516, Stop: 32791, Start Num: 52

Candidate Starts for Carrillo\_54:

(20, 32381), (Start: 52 @32516 has 9 MA's), (Start: 58 @32525 has 2 MA's), (89, 32582), (94, 32606), (96, 32612), (120, 32705),

Gene: Carthage\_43 Start: 38107, Stop: 37892, Start Num: 66

Candidate Starts for Carthage\_43:

(Start: 66 @38107 has 303 MA's), (Start: 85 @38077 has 25 MA's), (97, 38032), (111, 37999),

Gene: Casbah\_42 Start: 38879, Stop: 38643, Start Num: 56

Candidate Starts for Casbah\_42:

(Start: 56 @38879 has 59 MA's), (88, 38822), (107, 38756), (111, 38750),

Gene: Caspiboi\_44 Start: 38904, Stop: 38689, Start Num: 66

Candidate Starts for Caspiboi\_44:

(Start: 66 @38904 has 303 MA's), (Start: 85 @38874 has 25 MA's), (97, 38829),

Gene: Catfish\_31 Start: 25984, Stop: 25784, Start Num: 85

Candidate Starts for Catfish\_31:

(12, 26254), (49, 26041), (Start: 85 @25984 has 25 MA's), (91, 25972), (111, 25897),

Gene: ChaChing\_43 Start: 39042, Stop: 38806, Start Num: 56

Candidate Starts for ChaChing\_43:

(Start: 56 @39042 has 59 MA's), (88, 38985), (107, 38919), (111, 38913),

Gene: Chaelin\_45 Start: 38892, Stop: 38677, Start Num: 66

Candidate Starts for Chaelin\_45:

(25, 38994), (Start: 66 @38892 has 303 MA's), (Start: 85 @38862 has 25 MA's), (97, 38817),

Gene: Chah\_46 Start: 39212, Stop: 38997, Start Num: 66

Candidate Starts for Chah\_46:

(25, 39314), (Start: 66 @39212 has 303 MA's), (Start: 85 @39182 has 25 MA's), (97, 39137),

Gene: Chalmers\_43 Start: 39834, Stop: 39598, Start Num: 56

Candidate Starts for Chalmers\_43:

(Start: 56 @39834 has 59 MA's), (88, 39777), (107, 39711), (111, 39705),

Gene: Chandler\_43 Start: 39810, Stop: 39574, Start Num: 56

Candidate Starts for Chandler\_43:

(Start: 56 @39810 has 59 MA's), (88, 39753), (107, 39687), (111, 39681),

Gene: Charles1\_45 Start: 39180, Stop: 38965, Start Num: 66

Candidate Starts for Charles1\_45:

(25, 39282), (Start: 66 @39180 has 303 MA's), (Start: 85 @39150 has 25 MA's), (97, 39105),

Gene: CharlieGBrown\_44 Start: 38770, Stop: 38555, Start Num: 66

Candidate Starts for CharlieGBrown\_44:

(25, 38872), (Start: 66 @38770 has 303 MA's), (Start: 85 @38740 has 25 MA's), (97, 38695),

Gene: CharlottesWeb\_38 Start: 32763, Stop: 32527, Start Num: 48

Candidate Starts for CharlottesWeb\_38:

(41, 32778), (46, 32766), (Start: 48 @32763 has 5 MA's), (83, 32712), (88, 32706), (115, 32616),

Gene: Che9d\_28 Start: 24090, Stop: 23911, Start Num: 71

Candidate Starts for Che9d\_28:

(Start: 59 @24114 has 1 MA's), (Start: 71 @24090 has 45 MA's), (Start: 75 @24084 has 2 MA's),  
(Start: 93 @24057 has 4 MA's), (103, 24024), (125, 23928),

Gene: CheeseTouch\_37 Start: 27100, Stop: 26864, Start Num: 73

Candidate Starts for CheeseTouch\_37:

(Start: 73 @27100 has 37 MA's), (Start: 93 @27058 has 4 MA's), (98, 27037), (110, 26995), (119, 26947),

Gene: CheetO\_45 Start: 39194, Stop: 38979, Start Num: 66

Candidate Starts for CheetO\_45:

(25, 39296), (Start: 66 @39194 has 303 MA's), (Start: 85 @39164 has 25 MA's), (97, 39119),

Gene: Chentzyk\_43 Start: 39391, Stop: 39155, Start Num: 56

Candidate Starts for Chentzyk\_43:

(Start: 56 @39391 has 59 MA's), (88, 39334), (107, 39268), (111, 39262),

Gene: Cher\_44 Start: 38917, Stop: 38702, Start Num: 66

Candidate Starts for Cher\_44:

(Start: 66 @38917 has 303 MA's), (Start: 85 @38887 has 25 MA's), (97, 38842), (111, 38809),

Gene: Chickaboom\_25 Start: 18878, Stop: 18663, Start Num: 74

Candidate Starts for Chickaboom\_25:

(Start: 74 @18878 has 5 MA's),

Gene: Childish\_44 Start: 38920, Stop: 38705, Start Num: 66

Candidate Starts for Childish\_44:

(Start: 66 @38920 has 303 MA's), (Start: 85 @38890 has 25 MA's), (97, 38845), (111, 38812),

Gene: Chipette\_46 Start: 39410, Stop: 39195, Start Num: 66

Candidate Starts for Chipette\_46:

(Start: 66 @39410 has 303 MA's), (Start: 85 @39380 has 25 MA's), (97, 39335),

Gene: Chipper1996\_370 Start: 30385, Stop: 30167, Start Num: 79

Candidate Starts for Chipper1996\_370:

(21, 30535), (28, 30490), (29, 30487), (42, 30448), (61, 30415), (Start: 79 @30385 has 19 MA's), (89, 30364), (97, 30328), (101, 30313), (105, 30298), (111, 30286),

Gene: Chocolat\_37 Start: 30385, Stop: 30167, Start Num: 79

Candidate Starts for Chocolat\_37:

(21, 30535), (28, 30490), (29, 30487), (42, 30448), (61, 30415), (Start: 79 @30385 has 19 MA's), (89, 30364), (97, 30328), (101, 30313), (105, 30298), (111, 30286),

Gene: Chorkpop\_45 Start: 38916, Stop: 38701, Start Num: 66

Candidate Starts for Chorkpop\_45:

(25, 39018), (Start: 66 @38916 has 303 MA's), (Start: 85 @38886 has 25 MA's), (97, 38841),

Gene: ChrisnMich\_40 Start: 38163, Stop: 37957, Start Num: 67

Candidate Starts for ChrisnMich\_40:

(Start: 67 @38163 has 26 MA's), (Start: 85 @38142 has 25 MA's), (Start: 93 @38115 has 4 MA's), (97, 38097), (104, 38079), (114, 38049), (116, 38043), (121, 38022),

Gene: Chubster\_37 Start: 30157, Stop: 29939, Start Num: 79

Candidate Starts for Chubster\_37:

(21, 30307), (28, 30262), (29, 30259), (42, 30220), (61, 30187), (Start: 79 @30157 has 19 MA's), (89, 30136), (97, 30100), (101, 30085), (105, 30070), (111, 30058),

Gene: Chuni\_44 Start: 39211, Stop: 38996, Start Num: 66

Candidate Starts for Chuni\_44:

(25, 39313), (Start: 66 @39211 has 303 MA's), (Start: 85 @39181 has 25 MA's), (97, 39136),

Gene: Chunky\_45 Start: 39203, Stop: 38988, Start Num: 66

Candidate Starts for Chunky\_45:

(Start: 66 @39203 has 303 MA's), (Start: 85 @39173 has 25 MA's), (97, 39128),

Gene: Chute\_44 Start: 39241, Stop: 39026, Start Num: 66

Candidate Starts for Chute\_44:

(25, 39343), (Start: 66 @39241 has 303 MA's), (Start: 85 @39211 has 25 MA's), (97, 39166),

Gene: Clap\_30 Start: 25663, Stop: 25463, Start Num: 69

Candidate Starts for Clap\_30:

(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: CloverMinnie\_40 Start: 34764, Stop: 34510, Start Num: 56

Candidate Starts for CloverMinnie\_40:

(31, 34806), (Start: 56 @34764 has 59 MA's), (Start: 86 @34716 has 3 MA's), (99, 34665), (107, 34647), (116, 34620),

Gene: Cobra\_45 Start: 39201, Stop: 38986, Start Num: 66

Candidate Starts for Cobra\_45:

(Start: 66 @39201 has 303 MA's), (Start: 85 @39171 has 25 MA's), (97, 39126), (111, 39093),

Gene: Coffee\_44 Start: 39546, Stop: 39340, Start Num: 71

Candidate Starts for Coffee\_44:

(Start: 71 @39546 has 45 MA's), (Start: 86 @39519 has 3 MA's), (88, 39516), (104, 39462), (115, 39429),

Gene: Colbert\_45 Start: 39256, Stop: 39041, Start Num: 66

Candidate Starts for Colbert\_45:

(Start: 66 @39256 has 303 MA's), (Start: 85 @39226 has 25 MA's), (97, 39181),

Gene: Coldpizza\_41 Start: 37616, Stop: 37404, Start Num: 64

Candidate Starts for Coldpizza\_41:

(50, 37640), (55, 37634), (Start: 64 @37616 has 3 MA's), (96, 37550), (99, 37535), (107, 37517), (114, 37496), (125, 37445),

Gene: Coletti\_45 Start: 39241, Stop: 39026, Start Num: 66

Candidate Starts for Coletti\_45:

(25, 39343), (Start: 66 @39241 has 303 MA's), (Start: 85 @39211 has 25 MA's), (97, 39166),

Gene: Colucci\_37 Start: 29963, Stop: 29742, Start Num: 79

Candidate Starts for Colucci\_37:

(9, 30272), (13, 30215), (14, 30194), (42, 30026), (45, 30020), (Start: 67 @29981 has 26 MA's), (Start: 79 @29963 has 19 MA's), (101, 29891), (105, 29876), (111, 29864), (116, 29843),

Gene: Colusalem\_27 Start: 19035, Stop: 18814, Start Num: 85

Candidate Starts for Colusalem\_27:

(Start: 85 @19035 has 25 MA's),

Gene: Compostia\_44 Start: 39458, Stop: 39222, Start Num: 56

Candidate Starts for Compostia\_44:

(Start: 56 @39458 has 59 MA's), (88, 39401), (107, 39335), (111, 39329),

Gene: Conboy\_37 Start: 30384, Stop: 30166, Start Num: 79

Candidate Starts for Conboy\_37:

(21, 30534), (28, 30489), (29, 30486), (42, 30447), (61, 30414), (Start: 79 @30384 has 19 MA's), (89, 30363), (97, 30327), (101, 30312), (105, 30297), (111, 30285),

Gene: CookieDog\_52 Start: 32516, Stop: 32791, Start Num: 52

Candidate Starts for CookieDog\_52:

(6, 32120), (8, 32195), (20, 32381), (Start: 52 @32516 has 9 MA's), (Start: 58 @32525 has 2 MA's), (89, 32582), (94, 32606), (96, 32612), (120, 32705),

Gene: Cooper\_41 Start: 38382, Stop: 38176, Start Num: 67

Candidate Starts for Cooper\_41:

(Start: 67 @38382 has 26 MA's), (Start: 85 @38361 has 25 MA's), (Start: 93 @38334 has 4 MA's), (97, 38316), (104, 38298), (114, 38268), (116, 38262),

Gene: Coral\_26 Start: 18896, Stop: 18675, Start Num: 85

Candidate Starts for Coral\_26:

(Start: 85 @18896 has 25 MA's),

Gene: Cornbread\_44 Start: 38917, Stop: 38702, Start Num: 66

Candidate Starts for Cornbread\_44:

(Start: 66 @38917 has 303 MA's), (Start: 85 @38887 has 25 MA's), (97, 38842), (111, 38809),

Gene: Cornobble\_44 Start: 38755, Stop: 38540, Start Num: 66

Candidate Starts for Cornobble\_44:

(25, 38857), (Start: 66 @38755 has 303 MA's), (Start: 85 @38725 has 25 MA's), (97, 38680),

Gene: Corofin\_43 Start: 39053, Stop: 38817, Start Num: 56

Candidate Starts for Corofin\_43:

(Start: 56 @39053 has 59 MA's), (88, 38996), (107, 38930), (111, 38924),

Gene: Cosmolli16\_44 Start: 38905, Stop: 38690, Start Num: 66

Candidate Starts for Cosmolli16\_44:

(Start: 66 @38905 has 303 MA's), (Start: 85 @38875 has 25 MA's), (97, 38830),

Gene: Cote\_27 Start: 19041, Stop: 18820, Start Num: 85

Candidate Starts for Cote\_27:

(Start: 85 @19041 has 25 MA's),

Gene: Craff\_45 Start: 39198, Stop: 38983, Start Num: 66

Candidate Starts for Craff\_45:

(25, 39300), (Start: 66 @39198 has 303 MA's), (Start: 85 @39168 has 25 MA's), (97, 39123),

Gene: Crater\_36 Start: 28423, Stop: 28229, Start Num: 93

Candidate Starts for Crater\_36:

(Start: 73 @28465 has 37 MA's), (Start: 93 @28423 has 4 MA's), (97, 28405), (98, 28402), (110, 28360), (119, 28312), (121, 28300), (130, 28240),

Gene: Crownjwl\_45 Start: 38971, Stop: 38756, Start Num: 66

Candidate Starts for Crownjwl\_45:

(25, 39073), (Start: 66 @38971 has 303 MA's), (Start: 85 @38941 has 25 MA's), (97, 38896),

Gene: Cygnet\_25 Start: 19348, Stop: 19154, Start Num: 85  
Candidate Starts for Cygnet\_25:  
(36, 19423), (37, 19420), (Start: 85 @19348 has 25 MA's),

Gene: Cynthia\_30 Start: 25663, Stop: 25463, Start Num: 69  
Candidate Starts for Cynthia\_30:  
(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: DaddyDaniels\_45 Start: 38889, Stop: 38674, Start Num: 66  
Candidate Starts for DaddyDaniels\_45:  
(25, 38991), (Start: 66 @38889 has 303 MA's), (Start: 85 @38859 has 25 MA's), (97, 38814),

Gene: Daffy\_45 Start: 38920, Stop: 38705, Start Num: 66  
Candidate Starts for Daffy\_45:  
(Start: 66 @38920 has 303 MA's), (Start: 85 @38890 has 25 MA's), (97, 38845), (111, 38812),

Gene: Daisy\_43 Start: 39054, Stop: 38818, Start Num: 56  
Candidate Starts for Daisy\_43:  
(Start: 56 @39054 has 59 MA's), (88, 38997), (107, 38931), (111, 38925),

Gene: Daka\_46 Start: 39193, Stop: 38978, Start Num: 66  
Candidate Starts for Daka\_46:  
(Start: 66 @39193 has 303 MA's), (Start: 85 @39163 has 25 MA's), (97, 39118),

Gene: DanHam62\_26 Start: 18732, Stop: 18517, Start Num: 85  
Candidate Starts for DanHam62\_26:  
(Start: 85 @18732 has 25 MA's),

Gene: Daob\_27 Start: 19046, Stop: 18825, Start Num: 85  
Candidate Starts for Daob\_27:  
(Start: 85 @19046 has 25 MA's),

Gene: Dati\_45 Start: 38914, Stop: 38699, Start Num: 66  
Candidate Starts for Dati\_45:  
(Start: 66 @38914 has 303 MA's), (Start: 85 @38884 has 25 MA's), (97, 38839),

Gene: Deenasa\_43 Start: 39789, Stop: 39553, Start Num: 56  
Candidate Starts for Deenasa\_43:  
(Start: 56 @39789 has 59 MA's), (88, 39732), (107, 39666), (111, 39660),

Gene: DelRivs\_44 Start: 38915, Stop: 38700, Start Num: 66  
Candidate Starts for DelRivs\_44:  
(25, 39017), (Start: 66 @38915 has 303 MA's), (Start: 85 @38885 has 25 MA's), (97, 38840),

Gene: Demsculpinboyz\_28 Start: 24075, Stop: 23896, Start Num: 71  
Candidate Starts for Demsculpinboyz\_28:  
(Start: 59 @24099 has 1 MA's), (Start: 71 @24075 has 45 MA's), (Start: 75 @24069 has 2 MA's),  
(Start: 93 @24042 has 4 MA's), (103, 24009), (125, 23913),

Gene: Derpp\_44 Start: 38759, Stop: 38544, Start Num: 66  
Candidate Starts for Derpp\_44:

(Start: 66 @38759 has 303 MA's), (Start: 85 @38729 has 25 MA's), (97, 38684), (111, 38651),

Gene: Devonte\_43 Start: 39018, Stop: 38782, Start Num: 56

Candidate Starts for Devonte\_43:

(Start: 56 @39018 has 59 MA's), (88, 38961), (107, 38895), (111, 38889),

Gene: Dice\_44 Start: 38894, Stop: 38679, Start Num: 66

Candidate Starts for Dice\_44:

(Start: 66 @38894 has 303 MA's), (Start: 85 @38864 has 25 MA's), (97, 38819), (111, 38786),

Gene: DigitDog\_43 Start: 39348, Stop: 39139, Start Num: 66

Candidate Starts for DigitDog\_43:

(25, 39456), (Start: 66 @39348 has 303 MA's), (Start: 85 @39333 has 25 MA's), (91, 39321),

Gene: Dingo\_45 Start: 39177, Stop: 38962, Start Num: 66

Candidate Starts for Dingo\_45:

(Start: 66 @39177 has 303 MA's), (Start: 85 @39147 has 25 MA's), (97, 39102),

Gene: Dione\_44 Start: 38899, Stop: 38684, Start Num: 66

Candidate Starts for Dione\_44:

(Start: 66 @38899 has 303 MA's), (Start: 85 @38869 has 25 MA's), (97, 38824), (111, 38791),

Gene: DirtJuice\_45 Start: 39183, Stop: 38968, Start Num: 66

Candidate Starts for DirtJuice\_45:

(Start: 66 @39183 has 303 MA's), (Start: 85 @39153 has 25 MA's), (97, 39108),

Gene: Doddsville\_45 Start: 38913, Stop: 38698, Start Num: 66

Candidate Starts for Doddsville\_45:

(25, 39015), (Start: 66 @38913 has 303 MA's), (Start: 85 @38883 has 25 MA's), (97, 38838),

Gene: DoesntMatter\_44 Start: 39186, Stop: 38971, Start Num: 66

Candidate Starts for DoesntMatter\_44:

(25, 39288), (Start: 66 @39186 has 303 MA's), (Start: 85 @39156 has 25 MA's), (97, 39111),

Gene: DolOn\_46 Start: 39423, Stop: 39208, Start Num: 66

Candidate Starts for DolOn\_46:

(25, 39525), (Start: 66 @39423 has 303 MA's), (Start: 85 @39393 has 25 MA's), (97, 39348),

Gene: DonSanchon\_44 Start: 38893, Stop: 38678, Start Num: 66

Candidate Starts for DonSanchon\_44:

(25, 38995), (Start: 66 @38893 has 303 MA's), (Start: 85 @38863 has 25 MA's), (97, 38818),

Gene: Donny\_44 Start: 39653, Stop: 39444, Start Num: 66

Candidate Starts for Donny\_44:

(24, 39767), (25, 39761), (Start: 66 @39653 has 303 MA's), (Start: 85 @39638 has 25 MA's), (91, 39626), (97, 39593),

Gene: DrYang\_38 Start: 31723, Stop: 31505, Start Num: 79

Candidate Starts for DrYang\_38:

(Start: 79 @31723 has 19 MA's), (95, 31675), (97, 31666), (101, 31651), (105, 31636), (111, 31624), (127, 31549),

Gene: Dropshot\_52 Start: 32243, Stop: 32518, Start Num: 52

Candidate Starts for Dropshot\_52:

(6, 31847), (8, 31922), (20, 32108), (Start: 52 @32243 has 9 MA's), (Start: 58 @32252 has 2 MA's), (89, 32309), (94, 32333), (96, 32339), (120, 32432),

Gene: DuchessDung\_43 Start: 38047, Stop: 37832, Start Num: 66

Candidate Starts for DuchessDung\_43:

(Start: 66 @38047 has 303 MA's), (Start: 85 @38017 has 25 MA's), (97, 37972), (111, 37939),

Gene: Duggie\_44 Start: 38915, Stop: 38700, Start Num: 66

Candidate Starts for Duggie\_44:

(25, 39017), (Start: 66 @38915 has 303 MA's), (Start: 85 @38885 has 25 MA's), (97, 38840),

Gene: Durga\_45 Start: 39213, Stop: 38998, Start Num: 66

Candidate Starts for Durga\_45:

(25, 39315), (Start: 66 @39213 has 303 MA's), (Start: 85 @39183 has 25 MA's), (97, 39138),

Gene: Eaglehorse\_44 Start: 39470, Stop: 39264, Start Num: 71

Candidate Starts for Eaglehorse\_44:

(Start: 71 @39470 has 45 MA's), (Start: 86 @39443 has 3 MA's), (88, 39440), (104, 39386), (115, 39353),

Gene: EastView9101\_42 Start: 39303, Stop: 39094, Start Num: 66

Candidate Starts for EastView9101\_42:

(24, 39417), (25, 39411), (Start: 66 @39303 has 303 MA's), (Start: 85 @39288 has 25 MA's), (91, 39276), (97, 39243),

Gene: Ebert\_31 Start: 25587, Stop: 25387, Start Num: 69

Candidate Starts for Ebert\_31:

(Start: 69 @25587 has 13 MA's), (91, 25566), (Start: 93 @25551 has 4 MA's), (96, 25539), (111, 25503),

Gene: Ecliptus\_40 Start: 31004, Stop: 30768, Start Num: 73

Candidate Starts for Ecliptus\_40:

(Start: 73 @31004 has 37 MA's), (Start: 93 @30962 has 4 MA's), (98, 30941), (110, 30899), (119, 30851),

Gene: EdgarPoe\_37 Start: 30384, Stop: 30166, Start Num: 79

Candidate Starts for EdgarPoe\_37:

(21, 30534), (28, 30489), (29, 30486), (42, 30447), (61, 30414), (Start: 79 @30384 has 19 MA's), (89, 30363), (97, 30327), (101, 30312), (105, 30297), (111, 30285),

Gene: ElvisPhasley\_45 Start: 39235, Stop: 39020, Start Num: 66

Candidate Starts for ElvisPhasley\_45:

(Start: 66 @39235 has 303 MA's), (Start: 85 @39205 has 25 MA's), (97, 39160), (111, 39127),

Gene: Emiris\_45 Start: 39181, Stop: 38966, Start Num: 66

Candidate Starts for Emiris\_45:

(Start: 66 @39181 has 303 MA's), (Start: 85 @39151 has 25 MA's), (97, 39106), (111, 39073),

Gene: EmpTee\_45 Start: 39193, Stop: 38978, Start Num: 66

Candidate Starts for EmpTee\_45:

(25, 39295), (Start: 66 @39193 has 303 MA's), (Start: 85 @39163 has 25 MA's), (97, 39118),

Gene: Epah\_39 Start: 38171, Stop: 37965, Start Num: 67

Candidate Starts for Epah\_39:

(Start: 67 @38171 has 26 MA's), (Start: 85 @38150 has 25 MA's), (Start: 93 @38123 has 4 MA's), (97, 38105), (104, 38087), (114, 38057), (116, 38051), (121, 38030),

Gene: Eremos\_45 Start: 39192, Stop: 38977, Start Num: 66

Candidate Starts for Eremos\_45:

(Start: 66 @39192 has 303 MA's), (Start: 85 @39162 has 25 MA's), (97, 39117),

Gene: Etaye\_45 Start: 39183, Stop: 38968, Start Num: 66

Candidate Starts for Etaye\_45:

(Start: 66 @39183 has 303 MA's), (Start: 85 @39153 has 25 MA's), (97, 39108),

Gene: Eudoria\_35 Start: 29354, Stop: 29118, Start Num: 73

Candidate Starts for Eudoria\_35:

(Start: 73 @29354 has 37 MA's), (Start: 93 @29312 has 4 MA's), (98, 29291), (110, 29249), (119, 29201), (130, 29129),

Gene: Eugenia\_45 Start: 39202, Stop: 38987, Start Num: 66

Candidate Starts for Eugenia\_45:

(25, 39304), (Start: 66 @39202 has 303 MA's), (Start: 85 @39172 has 25 MA's), (97, 39127), (111, 39094),

Gene: Evaa\_38 Start: 33917, Stop: 33678, Start Num: 64

Candidate Starts for Evaa\_38:

(50, 33941), (55, 33935), (Start: 64 @33917 has 3 MA's), (96, 33851), (125, 33746),

Gene: Eviarto\_34 Start: 29497, Stop: 29261, Start Num: 73

Candidate Starts for Eviarto\_34:

(Start: 73 @29497 has 37 MA's), (Start: 93 @29455 has 4 MA's), (110, 29392), (119, 29344), (121, 29332),

Gene: Fanaw\_39 Start: 38868, Stop: 38662, Start Num: 67

Candidate Starts for Fanaw\_39:

(Start: 67 @38868 has 26 MA's), (Start: 85 @38847 has 25 MA's), (Start: 93 @38820 has 4 MA's), (97, 38802), (104, 38784), (114, 38754), (116, 38748),

Gene: Fang\_45 Start: 39206, Stop: 38991, Start Num: 66

Candidate Starts for Fang\_45:

(25, 39308), (Start: 66 @39206 has 303 MA's), (Start: 85 @39176 has 25 MA's), (97, 39131),

Gene: Faze9\_43 Start: 39566, Stop: 39360, Start Num: 71

Candidate Starts for Faze9\_43:

(Start: 71 @39566 has 45 MA's), (Start: 86 @39539 has 3 MA's), (88, 39536), (104, 39482), (115, 39449),

Gene: FelixTres\_40 Start: 34827, Stop: 34573, Start Num: 56

Candidate Starts for FelixTres\_40:

(31, 34869), (Start: 56 @34827 has 59 MA's), (Start: 86 @34779 has 3 MA's), (99, 34728), (107, 34710), (116, 34683),

Gene: Flake\_46 Start: 39248, Stop: 39033, Start Num: 66

Candidate Starts for Flake\_46:

(25, 39350), (Start: 66 @39248 has 303 MA's), (Start: 85 @39218 has 25 MA's), (97, 39173),

Gene: FleetyMac\_45 Start: 39201, Stop: 38986, Start Num: 66

Candidate Starts for FleetyMac\_45:

(25, 39303), (Start: 66 @39201 has 303 MA's), (Start: 85 @39171 has 25 MA's), (97, 39126),

Gene: FluffyNinja\_45 Start: 39199, Stop: 38984, Start Num: 66

Candidate Starts for FluffyNinja\_45:

(Start: 66 @39199 has 303 MA's), (Start: 85 @39169 has 25 MA's), (97, 39124), (111, 39091),

Gene: ForDig\_37 Start: 36976, Stop: 36779, Start Num: 66

Candidate Starts for ForDig\_37:

(Start: 66 @36976 has 303 MA's), (Start: 75 @36964 has 2 MA's), (88, 36958), (Start: 93 @36937 has 4 MA's), (97, 36919),

Gene: Fortunato\_41 Start: 39196, Stop: 38990, Start Num: 67

Candidate Starts for Fortunato\_41:

(Start: 67 @39196 has 26 MA's), (Start: 85 @39175 has 25 MA's), (Start: 93 @39148 has 4 MA's), (97, 39130), (104, 39112), (114, 39082), (116, 39076),

Gene: Fozzie\_44 Start: 39215, Stop: 39000, Start Num: 66

Candidate Starts for Fozzie\_44:

(Start: 66 @39215 has 303 MA's), (Start: 85 @39185 has 25 MA's), (97, 39140), (111, 39107),

Gene: Frankicide\_45 Start: 39211, Stop: 38996, Start Num: 66

Candidate Starts for Frankicide\_45:

(Start: 66 @39211 has 303 MA's), (Start: 85 @39181 has 25 MA's), (97, 39136), (111, 39103),

Gene: Frederick\_41 Start: 39202, Stop: 38996, Start Num: 67

Candidate Starts for Frederick\_41:

(Start: 67 @39202 has 26 MA's), (Start: 85 @39181 has 25 MA's), (Start: 93 @39154 has 4 MA's), (97, 39136), (104, 39118), (114, 39088), (116, 39082),

Gene: FremontTroll\_45 Start: 38953, Stop: 38738, Start Num: 66

Candidate Starts for FremontTroll\_45:

(Start: 66 @38953 has 303 MA's), (Start: 85 @38923 has 25 MA's), (97, 38878),

Gene: FrenchFry\_44 Start: 39560, Stop: 39354, Start Num: 71

Candidate Starts for FrenchFry\_44:

(Start: 71 @39560 has 45 MA's), (Start: 86 @39533 has 3 MA's), (88, 39530), (104, 39476), (115, 39443),

Gene: Fresco\_38 Start: 32837, Stop: 32601, Start Num: 48

Candidate Starts for Fresco\_38:

(46, 32840), (Start: 48 @32837 has 5 MA's), (63, 32816), (Start: 67 @32810 has 26 MA's), (83, 32786), (88, 32780), (115, 32690),

Gene: Freya\_44 Start: 38890, Stop: 38675, Start Num: 66

Candidate Starts for Freya\_44:

(Start: 66 @38890 has 303 MA's), (Start: 85 @38860 has 25 MA's), (97, 38815), (111, 38782),

Gene: FriarPreacher\_44 Start: 39217, Stop: 39002, Start Num: 66

Candidate Starts for FriarPreacher\_44:

(Start: 66 @39217 has 303 MA's), (Start: 85 @39187 has 25 MA's), (97, 39142),

Gene: Frickyeah\_39 Start: 28597, Stop: 28403, Start Num: 93

Candidate Starts for Frickyeah\_39:

(Start: 73 @28639 has 37 MA's), (Start: 93 @28597 has 4 MA's), (98, 28576), (110, 28534), (119, 28486),

Gene: Fringe\_45 Start: 39182, Stop: 38967, Start Num: 66

Candidate Starts for Fringe\_45:

(25, 39284), (Start: 66 @39182 has 303 MA's), (Start: 85 @39152 has 25 MA's), (97, 39107),

Gene: FugateOSU\_44 Start: 38895, Stop: 38680, Start Num: 66

Candidate Starts for FugateOSU\_44:

(Start: 66 @38895 has 303 MA's), (Start: 85 @38865 has 25 MA's), (97, 38820),

Gene: Funsized\_46 Start: 41756, Stop: 41544, Start Num: 66

Candidate Starts for Funsized\_46:

(10, 42029), (15, 41957), (49, 41783), (Start: 66 @41756 has 303 MA's), (Start: 71 @41747 has 45 MA's), (87, 41723), (Start: 93 @41702 has 4 MA's), (97, 41684), (104, 41666),

Gene: Gadget\_44 Start: 39041, Stop: 38805, Start Num: 56

Candidate Starts for Gadget\_44:

(Start: 56 @39041 has 59 MA's), (88, 38984), (107, 38918), (111, 38912),

Gene: Galaxy\_26 Start: 19656, Stop: 19465, Start Num: 82

Candidate Starts for Galaxy\_26:

(Start: 82 @19656 has 2 MA's),

Gene: Gareth\_44 Start: 38898, Stop: 38683, Start Num: 66

Candidate Starts for Gareth\_44:

(Start: 66 @38898 has 303 MA's), (Start: 85 @38868 has 25 MA's), (97, 38823), (111, 38790),

Gene: GemG\_30 Start: 25663, Stop: 25463, Start Num: 69

Candidate Starts for GemG\_30:

(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: GeneCoco\_45 Start: 39207, Stop: 38992, Start Num: 66

Candidate Starts for GeneCoco\_45:

(Start: 66 @39207 has 303 MA's), (Start: 85 @39177 has 25 MA's), (97, 39132), (111, 39099),

Gene: Gervas\_43 Start: 39008, Stop: 38772, Start Num: 56

Candidate Starts for Gervas\_43:

(Start: 56 @39008 has 59 MA's), (88, 38951), (107, 38885), (111, 38879),

Gene: Getalong\_40 Start: 31359, Stop: 31123, Start Num: 73

Candidate Starts for Getalong\_40:

(Start: 73 @31359 has 37 MA's), (Start: 93 @31317 has 4 MA's), (98, 31296), (110, 31254), (119, 31206),

Gene: GinPorsche\_40 Start: 38171, Stop: 37965, Start Num: 67

Candidate Starts for GinPorsche\_40:

(Start: 67 @38171 has 26 MA's), (Start: 85 @38150 has 25 MA's), (Start: 93 @38123 has 4 MA's), (97, 38105), (104, 38087), (114, 38057), (116, 38051), (121, 38030),

Gene: Giraffe\_45 Start: 38901, Stop: 38686, Start Num: 66

Candidate Starts for Giraffe\_45:

(25, 39003), (Start: 66 @38901 has 303 MA's), (Start: 85 @38871 has 25 MA's), (97, 38826),

Gene: Gizermo\_30 Start: 25663, Stop: 25463, Start Num: 69

Candidate Starts for Gizermo\_30:

(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: Glass\_44 Start: 39560, Stop: 39354, Start Num: 71

Candidate Starts for Glass\_44:

(Start: 71 @39560 has 45 MA's), (Start: 86 @39533 has 3 MA's), (88, 39530), (104, 39476), (115, 39443),

Gene: GlenHope\_44 Start: 39021, Stop: 38785, Start Num: 56

Candidate Starts for GlenHope\_44:

(Start: 56 @39021 has 59 MA's), (88, 38964), (107, 38898), (111, 38892),

Gene: Glotell\_26 Start: 18731, Stop: 18516, Start Num: 85

Candidate Starts for Glotell\_26:

(26, 18866), (38, 18812), (78, 18743), (Start: 85 @18731 has 25 MA's),

Gene: Glubnar\_44 Start: 39020, Stop: 38784, Start Num: 56

Candidate Starts for Glubnar\_44:

(Start: 56 @39020 has 59 MA's), (88, 38963), (107, 38897), (111, 38891),

Gene: Godines\_44 Start: 39502, Stop: 39296, Start Num: 71

Candidate Starts for Godines\_44:

(Start: 71 @39502 has 45 MA's), (Start: 86 @39475 has 3 MA's), (88, 39472), (104, 39418), (115, 39385),

Gene: Gophee\_45 Start: 39184, Stop: 38969, Start Num: 66

Candidate Starts for Gophee\_45:

(25, 39286), (Start: 66 @39184 has 303 MA's), (Start: 85 @39154 has 25 MA's), (97, 39109),

Gene: Grand2040\_44 Start: 38916, Stop: 38701, Start Num: 66

Candidate Starts for Grand2040\_44:

(Start: 66 @38916 has 303 MA's), (Start: 85 @38886 has 25 MA's), (97, 38841), (111, 38808),

Gene: GreenChile\_45 Start: 39192, Stop: 38977, Start Num: 66

Candidate Starts for GreenChile\_45:

(25, 39294), (Start: 66 @39192 has 303 MA's), (Start: 85 @39162 has 25 MA's), (97, 39117),

Gene: Guzman\_52 Start: 32499, Stop: 32774, Start Num: 52

Candidate Starts for Guzman\_52:

(6, 32103), (8, 32178), (20, 32364), (Start: 52 @32499 has 9 MA's), (Start: 58 @32508 has 2 MA's), (89, 32565), (94, 32589), (96, 32595), (120, 32688),

Gene: Gwennie1\_45 Start: 39262, Stop: 39047, Start Num: 66

Candidate Starts for Gwennie1\_45:

(Start: 66 @39262 has 303 MA's), (Start: 85 @39232 has 25 MA's), (97, 39187), (111, 39154),

Gene: Gwilliam\_45 Start: 39196, Stop: 38981, Start Num: 66

Candidate Starts for Gwilliam\_45:

(Start: 66 @39196 has 303 MA's), (Start: 85 @39166 has 25 MA's), (97, 39121),

Gene: Gyarad\_0045 Start: 39198, Stop: 38983, Start Num: 66

Candidate Starts for Gyarad\_0045:

(Start: 66 @39198 has 303 MA's), (Start: 85 @39168 has 25 MA's), (97, 39123), (111, 39090),

Gene: HSavage\_45 Start: 39202, Stop: 38987, Start Num: 66

Candidate Starts for HSavage\_45:

(Start: 66 @39202 has 303 MA's), (Start: 85 @39172 has 25 MA's), (97, 39127), (111, 39094),

Gene: Haimas\_45 Start: 39193, Stop: 38978, Start Num: 66

Candidate Starts for Haimas\_45:

(Start: 66 @39193 has 303 MA's), (Start: 85 @39163 has 25 MA's), (97, 39118),

Gene: Haleema\_44 Start: 38916, Stop: 38701, Start Num: 66

Candidate Starts for Haleema\_44:

(Start: 66 @38916 has 303 MA's), (Start: 85 @38886 has 25 MA's), (97, 38841), (111, 38808),

Gene: Haley23\_30 Start: 25663, Stop: 25463, Start Num: 69

Candidate Starts for Haley23\_30:

(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: Halfpint\_42 Start: 38847, Stop: 38611, Start Num: 56

Candidate Starts for Halfpint\_42:

(Start: 56 @38847 has 59 MA's), (88, 38790), (107, 38724), (111, 38718),

Gene: Hally898\_39 Start: 38183, Stop: 37977, Start Num: 67

Candidate Starts for Hally898\_39:

(Start: 67 @38183 has 26 MA's), (Start: 85 @38162 has 25 MA's), (Start: 93 @38135 has 4 MA's), (97, 38117), (104, 38099), (114, 38069), (116, 38063), (121, 38042),

Gene: Hamish\_45 Start: 39185, Stop: 38970, Start Num: 66

Candidate Starts for Hamish\_45:

(Start: 66 @39185 has 303 MA's), (Start: 85 @39155 has 25 MA's), (97, 39110),

Gene: Hangman\_40 Start: 39194, Stop: 38988, Start Num: 67

Candidate Starts for Hangman\_40:

(Start: 67 @39194 has 26 MA's), (Start: 85 @39173 has 25 MA's), (Start: 93 @39146 has 4 MA's), (97, 39128), (104, 39110), (114, 39080), (116, 39074),

Gene: HannahPhantana\_27 Start: 19053, Stop: 18832, Start Num: 85

Candidate Starts for HannahPhantana\_27:

(Start: 85 @19053 has 25 MA's),

Gene: Happabalu\_45 Start: 38914, Stop: 38699, Start Num: 66

Candidate Starts for Happabalu\_45:

(Start: 66 @38914 has 303 MA's), (Start: 85 @38884 has 25 MA's), (97, 38839),

Gene: Hartsy\_45 Start: 39236, Stop: 39021, Start Num: 66  
Candidate Starts for Hartsy\_45:  
(Start: 66 @39236 has 303 MA's), (Start: 85 @39206 has 25 MA's), (97, 39161),

Gene: Harvey\_45 Start: 39211, Stop: 38996, Start Num: 66  
Candidate Starts for Harvey\_45:  
(25, 39313), (Start: 66 @39211 has 303 MA's), (Start: 85 @39181 has 25 MA's), (97, 39136),

Gene: HarveySr\_43 Start: 39014, Stop: 38778, Start Num: 56  
Candidate Starts for HarveySr\_43:  
(Start: 56 @39014 has 59 MA's), (88, 38957), (107, 38891), (111, 38885),

Gene: Hashim76\_46 Start: 38349, Stop: 38134, Start Num: 68  
Candidate Starts for Hashim76\_46:  
(Start: 68 @38349 has 3 MA's), (Start: 85 @38325 has 25 MA's), (99, 38271), (126, 38175),

Gene: Heath\_39 Start: 38801, Stop: 38595, Start Num: 67  
Candidate Starts for Heath\_39:  
(Start: 67 @38801 has 26 MA's), (Start: 85 @38780 has 25 MA's), (Start: 93 @38753 has 4 MA's), (97, 38735), (104, 38717), (114, 38687), (116, 38681),

Gene: Heathcliff\_43 Start: 38992, Stop: 38756, Start Num: 56  
Candidate Starts for Heathcliff\_43:  
(Start: 56 @38992 has 59 MA's), (88, 38935), (107, 38869), (111, 38863),

Gene: Hedgerow\_44 Start: 39542, Stop: 39336, Start Num: 71  
Candidate Starts for Hedgerow\_44:  
(Start: 71 @39542 has 45 MA's), (Start: 86 @39515 has 3 MA's), (88, 39512), (104, 39458), (115, 39425),

Gene: Hekos\_42 Start: 37765, Stop: 37550, Start Num: 66  
Candidate Starts for Hekos\_42:  
(25, 37867), (Start: 66 @37765 has 303 MA's), (Start: 85 @37735 has 25 MA's), (97, 37690),

Gene: Held\_45 Start: 38900, Stop: 38685, Start Num: 66  
Candidate Starts for Held\_45:  
(25, 39002), (Start: 66 @38900 has 303 MA's), (Start: 85 @38870 has 25 MA's), (97, 38825),

Gene: HenryJackson\_44 Start: 38916, Stop: 38701, Start Num: 66  
Candidate Starts for HenryJackson\_44:  
(25, 39018), (Start: 66 @38916 has 303 MA's), (Start: 85 @38886 has 25 MA's), (97, 38841),

Gene: Herod\_34 Start: 29521, Stop: 29285, Start Num: 73  
Candidate Starts for Herod\_34:  
(Start: 73 @29521 has 37 MA's), (Start: 93 @29479 has 4 MA's), (110, 29416), (119, 29368), (121, 29356),

Gene: Hertubise\_45 Start: 39207, Stop: 38992, Start Num: 66  
Candidate Starts for Hertubise\_45:  
(Start: 66 @39207 has 303 MA's), (Start: 85 @39177 has 25 MA's), (97, 39132),

Gene: Hetaeria\_45 Start: 39209, Stop: 38994, Start Num: 66  
Candidate Starts for Hetaeria\_45:

(Start: 66 @39209 has 303 MA's), (Start: 85 @39179 has 25 MA's), (97, 39134),

Gene: HighStump\_44 Start: 38899, Stop: 38684, Start Num: 66

Candidate Starts for HighStump\_44:

(25, 39001), (Start: 66 @38899 has 303 MA's), (Start: 85 @38869 has 25 MA's), (97, 38824),

Gene: Hocus\_44 Start: 38905, Stop: 38690, Start Num: 66

Candidate Starts for Hocus\_44:

(Start: 66 @38905 has 303 MA's), (Start: 85 @38875 has 25 MA's), (97, 38830), (111, 38797),

Gene: HogWash\_45 Start: 39205, Stop: 38990, Start Num: 66

Candidate Starts for HogWash\_45:

(Start: 66 @39205 has 303 MA's), (Start: 85 @39175 has 25 MA's), (97, 39130),

Gene: Holeinone\_44 Start: 39422, Stop: 39216, Start Num: 71

Candidate Starts for Holeinone\_44:

(Start: 71 @39422 has 45 MA's), (Start: 86 @39395 has 3 MA's), (88, 39392), (104, 39338), (115, 39305),

Gene: Holliday\_38 Start: 29214, Stop: 28978, Start Num: 73

Candidate Starts for Holliday\_38:

(Start: 73 @29214 has 37 MA's), (Start: 93 @29172 has 4 MA's), (98, 29151), (110, 29109), (119, 29061),

Gene: Horchata\_45 Start: 39187, Stop: 38972, Start Num: 66

Candidate Starts for Horchata\_45:

(25, 39289), (Start: 66 @39187 has 303 MA's), (Start: 85 @39157 has 25 MA's), (97, 39112),

Gene: Horus\_39 Start: 30560, Stop: 30324, Start Num: 73

Candidate Starts for Horus\_39:

(Start: 73 @30560 has 37 MA's), (Start: 93 @30518 has 4 MA's), (98, 30497), (110, 30455), (119, 30407),

Gene: Hosp\_035 Start: 35180, Stop: 34983, Start Num: 66

Candidate Starts for Hosp\_035:

(Start: 66 @35180 has 303 MA's), (Start: 75 @35168 has 2 MA's), (Start: 93 @35141 has 4 MA's), (97, 35123),

Gene: Hugley\_32 Start: 29478, Stop: 29284, Start Num: 93

Candidate Starts for Hugley\_32:

(Start: 73 @29520 has 37 MA's), (Start: 93 @29478 has 4 MA's), (110, 29415), (119, 29367), (121, 29355),

Gene: HumptyDumpty\_37 Start: 30383, Stop: 30165, Start Num: 79

Candidate Starts for HumptyDumpty\_37:

(21, 30533), (28, 30488), (29, 30485), (42, 30446), (61, 30413), (Start: 79 @30383 has 19 MA's), (89, 30362), (97, 30326), (101, 30311), (105, 30296), (111, 30284),

Gene: Hydro\_40 Start: 39211, Stop: 39005, Start Num: 67

Candidate Starts for Hydro\_40:

(Start: 67 @39211 has 26 MA's), (Start: 85 @39190 has 25 MA's), (Start: 93 @39163 has 4 MA's), (97, 39145), (104, 39127), (114, 39097), (116, 39091),

Gene: ImtiyazSitla\_44 Start: 38747, Stop: 38532, Start Num: 66

Candidate Starts for ImtiyazSitla\_44:

(Start: 66 @38747 has 303 MA's), (Start: 85 @38717 has 25 MA's), (97, 38672), (111, 38639),

Gene: Imvubu\_36 Start: 35895, Stop: 35680, Start Num: 66

Candidate Starts for Imvubu\_36:

(11, 36156), (15, 36096), (Start: 66 @35895 has 303 MA's), (Start: 71 @35886 has 45 MA's), (87, 35859), (Start: 93 @35838 has 4 MA's), (97, 35820), (114, 35772), (116, 35766),

Gene: Inchworm\_45 Start: 39185, Stop: 38970, Start Num: 66

Candidate Starts for Inchworm\_45:

(25, 39287), (Start: 66 @39185 has 303 MA's), (Start: 85 @39155 has 25 MA's), (97, 39110),

Gene: Indlovu\_42 Start: 38503, Stop: 38300, Start Num: 66

Candidate Starts for Indlovu\_42:

(25, 38602), (Start: 66 @38503 has 303 MA's), (Start: 85 @38485 has 25 MA's), (Start: 93 @38458 has 4 MA's), (97, 38440), (114, 38392),

Gene: Inverness\_45 Start: 39199, Stop: 38984, Start Num: 66

Candidate Starts for Inverness\_45:

(Start: 66 @39199 has 303 MA's), (Start: 85 @39169 has 25 MA's), (97, 39124), (111, 39091),

Gene: Iridessa\_45 Start: 38901, Stop: 38686, Start Num: 66

Candidate Starts for Iridessa\_45:

(Start: 66 @38901 has 303 MA's), (Start: 85 @38871 has 25 MA's), (97, 38826), (111, 38793),

Gene: Iridoclysis\_45 Start: 39179, Stop: 38964, Start Num: 66

Candidate Starts for Iridoclysis\_45:

(Start: 66 @39179 has 303 MA's), (Start: 85 @39149 has 25 MA's), (97, 39104),

Gene: IsaacEli\_45 Start: 39203, Stop: 38988, Start Num: 66

Candidate Starts for IsaacEli\_45:

(25, 39305), (Start: 66 @39203 has 303 MA's), (Start: 85 @39173 has 25 MA's), (97, 39128),

Gene: ItsyBitsy1\_44 Start: 39424, Stop: 39218, Start Num: 71

Candidate Starts for ItsyBitsy1\_44:

(Start: 71 @39424 has 45 MA's), (Start: 86 @39397 has 3 MA's), (88, 39394), (104, 39340), (115, 39307),

Gene: JAMaL\_40 Start: 39382, Stop: 39176, Start Num: 67

Candidate Starts for JAMaL\_40:

(Start: 67 @39382 has 26 MA's), (Start: 85 @39361 has 25 MA's), (Start: 93 @39334 has 4 MA's), (97, 39316), (104, 39298), (114, 39268), (116, 39262),

Gene: JDog\_44 Start: 38916, Stop: 38701, Start Num: 66

Candidate Starts for JDog\_44:

(Start: 66 @38916 has 303 MA's), (Start: 85 @38886 has 25 MA's), (97, 38841),

Gene: JaNo\_37 Start: 30383, Stop: 30165, Start Num: 79

Candidate Starts for JaNo\_37:

(21, 30533), (28, 30488), (29, 30485), (42, 30446), (61, 30413), (Start: 79 @30383 has 19 MA's), (89, 30362), (97, 30326), (101, 30311), (105, 30296), (111, 30284),

Gene: JacAttac\_45 Start: 39185, Stop: 38970, Start Num: 66  
Candidate Starts for JacAttac\_45:  
(Start: 66 @39185 has 303 MA's), (Start: 85 @39155 has 25 MA's), (97, 39110), (111, 39077),

Gene: Jace\_90 Start: 50456, Stop: 50166, Start Num: 47  
Candidate Starts for Jace\_90:  
(18, 50609), (Start: 47 @50456 has 1 MA's), (Start: 52 @50450 has 9 MA's), (65, 50429), (125, 50234),  
(131, 50192),

Gene: Jackstina\_40 Start: 38951, Stop: 38715, Start Num: 56  
Candidate Starts for Jackstina\_40:  
(Start: 56 @38951 has 59 MA's), (88, 38894), (107, 38828), (111, 38822),

Gene: JaguarMi\_40 Start: 38677, Stop: 38471, Start Num: 67  
Candidate Starts for JaguarMi\_40:  
(Start: 67 @38677 has 26 MA's), (Start: 85 @38656 has 25 MA's), (Start: 93 @38629 has 4 MA's), (97,  
38611), (104, 38593), (114, 38563), (116, 38557),

Gene: JakeO\_44 Start: 38918, Stop: 38703, Start Num: 66  
Candidate Starts for JakeO\_44:  
(Start: 66 @38918 has 303 MA's), (Start: 85 @38888 has 25 MA's), (97, 38843),

Gene: Jakelyne\_55 Start: 32609, Stop: 32884, Start Num: 52  
Candidate Starts for Jakelyne\_55:  
(20, 32474), (Start: 52 @32609 has 9 MA's), (Start: 58 @32618 has 2 MA's), (89, 32675), (94, 32699),  
(96, 32705), (120, 32798),

Gene: Jalleen\_30 Start: 25302, Stop: 25102, Start Num: 69  
Candidate Starts for Jalleen\_30:  
(Start: 69 @25302 has 13 MA's), (91, 25281), (Start: 93 @25266 has 4 MA's), (96, 25254), (111,  
25218),

Gene: Jamun\_25 Start: 19385, Stop: 19188, Start Num: 74  
Candidate Starts for Jamun\_25:  
(1, 20447), (2, 20237), (3, 19964), (7, 19799), (Start: 74 @19385 has 5 MA's),

Gene: JangoPhett\_45 Start: 39187, Stop: 38972, Start Num: 66  
Candidate Starts for JangoPhett\_45:  
(Start: 66 @39187 has 303 MA's), (Start: 85 @39157 has 25 MA's), (97, 39112),

Gene: JayCookie\_37 Start: 30387, Stop: 30169, Start Num: 79  
Candidate Starts for JayCookie\_37:  
(21, 30537), (28, 30492), (29, 30489), (42, 30450), (61, 30417), (Start: 79 @30387 has 19 MA's), (89,  
30366), (97, 30330), (101, 30315), (105, 30300), (111, 30288),

Gene: Jesabah\_45 Start: 38918, Stop: 38703, Start Num: 66  
Candidate Starts for Jesabah\_45:  
(Start: 66 @38918 has 303 MA's), (Start: 85 @38888 has 25 MA's), (97, 38843), (111, 38810),

Gene: Jillium\_44 Start: 38909, Stop: 38694, Start Num: 66  
Candidate Starts for Jillium\_44:  
(Start: 66 @38909 has 303 MA's), (Start: 85 @38879 has 25 MA's), (97, 38834),

Gene: Jiminy\_44 Start: 38753, Stop: 38538, Start Num: 66  
Candidate Starts for Jiminy\_44:  
(25, 38855), (Start: 66 @38753 has 303 MA's), (Start: 85 @38723 has 25 MA's), (97, 38678),

Gene: Jiraiya\_44 Start: 38906, Stop: 38691, Start Num: 66  
Candidate Starts for Jiraiya\_44:  
(25, 39008), (Start: 66 @38906 has 303 MA's), (Start: 85 @38876 has 25 MA's), (97, 38831),

Gene: Jolie1\_037 Start: 36967, Stop: 36770, Start Num: 66  
Candidate Starts for Jolie1\_037:  
(Start: 66 @36967 has 303 MA's), (Start: 75 @36955 has 2 MA's), (88, 36949), (Start: 93 @36928 has 4 MA's), (97, 36910),

Gene: JoyceMaria\_40 Start: 39197, Stop: 38991, Start Num: 67  
Candidate Starts for JoyceMaria\_40:  
(Start: 67 @39197 has 26 MA's), (Start: 85 @39176 has 25 MA's), (Start: 93 @39149 has 4 MA's), (97, 39131), (104, 39113), (114, 39083), (116, 39077),

Gene: KBurrousTX\_37 Start: 31486, Stop: 31268, Start Num: 79  
Candidate Starts for KBurrousTX\_37:  
(61, 31513), (Start: 79 @31486 has 19 MA's), (91, 31462), (97, 31429), (101, 31414), (105, 31399), (111, 31387), (112, 31381),

Gene: KHumphrey\_26 Start: 18730, Stop: 18515, Start Num: 85  
Candidate Starts for KHumphrey\_26:  
(Start: 85 @18730 has 25 MA's),

Gene: KLucky39\_45 Start: 39197, Stop: 38982, Start Num: 66  
Candidate Starts for KLucky39\_45:  
(Start: 66 @39197 has 303 MA's), (Start: 85 @39167 has 25 MA's), (97, 39122), (111, 39089),

Gene: Kabreeze\_37 Start: 30383, Stop: 30165, Start Num: 79  
Candidate Starts for Kabreeze\_37:  
(21, 30533), (28, 30488), (29, 30485), (42, 30446), (61, 30413), (Start: 79 @30383 has 19 MA's), (89, 30362), (97, 30326), (101, 30311), (105, 30296), (111, 30284),

Gene: Kahve\_44 Start: 38913, Stop: 38698, Start Num: 66  
Candidate Starts for Kahve\_44:  
(Start: 66 @38913 has 303 MA's), (Start: 85 @38883 has 25 MA's), (97, 38838),

Gene: Kailash\_45 Start: 39251, Stop: 39036, Start Num: 66  
Candidate Starts for Kailash\_45:  
(Start: 66 @39251 has 303 MA's), (Start: 85 @39221 has 25 MA's), (97, 39176),

Gene: Kaleb\_44 Start: 39557, Stop: 39351, Start Num: 71  
Candidate Starts for Kaleb\_44:  
(Start: 71 @39557 has 45 MA's), (Start: 86 @39530 has 3 MA's), (88, 39527), (104, 39473), (115, 39440),

Gene: Kamiyu\_43 Start: 39000, Stop: 38764, Start Num: 56  
Candidate Starts for Kamiyu\_43:  
(Start: 56 @39000 has 59 MA's), (88, 38943), (107, 38877), (111, 38871),

Gene: KarasumaRum\_45 Start: 39790, Stop: 39581, Start Num: 66  
Candidate Starts for KarasumaRum\_45:  
(25, 39898), (Start: 66 @39790 has 303 MA's), (Start: 85 @39775 has 25 MA's), (91, 39763),

Gene: Karn\_44 Start: 38913, Stop: 38698, Start Num: 66  
Candidate Starts for Karn\_44:  
(25, 39015), (Start: 66 @38913 has 303 MA's), (Start: 85 @38883 has 25 MA's), (97, 38838),

Gene: Katniss\_45 Start: 39212, Stop: 38997, Start Num: 66  
Candidate Starts for Katniss\_45:  
(25, 39314), (Start: 66 @39212 has 303 MA's), (Start: 85 @39182 has 25 MA's), (97, 39137),

Gene: KayaCho\_37 Start: 36966, Stop: 36766, Start Num: 66  
Candidate Starts for KayaCho\_37:  
(Start: 66 @36966 has 303 MA's), (Start: 85 @36951 has 25 MA's), (Start: 93 @36924 has 4 MA's),  
(97, 36906),

Gene: Keitherie\_45 Start: 39250, Stop: 39035, Start Num: 66  
Candidate Starts for Keitherie\_45:  
(25, 39352), (Start: 66 @39250 has 303 MA's), (Start: 85 @39220 has 25 MA's), (97, 39175),

Gene: Kenna\_38 Start: 29550, Stop: 29314, Start Num: 73  
Candidate Starts for Kenna\_38:  
(Start: 73 @29550 has 37 MA's), (Start: 93 @29508 has 4 MA's), (98, 29487), (110, 29445), (119,  
29397),

Gene: Kenuha5\_22 Start: 24468, Stop: 24289, Start Num: 71  
Candidate Starts for Kenuha5\_22:  
(Start: 59 @24492 has 1 MA's), (Start: 71 @24468 has 45 MA's), (Start: 75 @24462 has 2 MA's),  
(Start: 93 @24435 has 4 MA's), (103, 24402), (125, 24306),

Gene: Kersh\_23 Start: 24511, Stop: 24332, Start Num: 71  
Candidate Starts for Kersh\_23:  
(Start: 59 @24535 has 1 MA's), (Start: 71 @24511 has 45 MA's), (Start: 75 @24505 has 2 MA's),  
(Start: 93 @24478 has 4 MA's), (103, 24445), (125, 24349),

Gene: Khan1\_45 Start: 38934, Stop: 38719, Start Num: 66  
Candidate Starts for Khan1\_45:  
(Start: 66 @38934 has 303 MA's), (Start: 85 @38904 has 25 MA's), (97, 38859), (111, 38826),

Gene: Kheth\_44 Start: 39445, Stop: 39239, Start Num: 71  
Candidate Starts for Kheth\_44:  
(Start: 71 @39445 has 45 MA's), (Start: 86 @39418 has 3 MA's), (88, 39415), (104, 39361), (115,  
39328),

Gene: Kikipoo\_45 Start: 39203, Stop: 38988, Start Num: 66  
Candidate Starts for Kikipoo\_45:  
(25, 39305), (Start: 66 @39203 has 303 MA's), (Start: 85 @39173 has 25 MA's), (97, 39128),

Gene: Kimbrough\_45 Start: 38905, Stop: 38690, Start Num: 66  
Candidate Starts for Kimbrough\_45:  
(25, 39007), (Start: 66 @38905 has 303 MA's), (Start: 85 @38875 has 25 MA's), (97, 38830),

Gene: KingTut\_36 Start: 34574, Stop: 34359, Start Num: 66  
Candidate Starts for KingTut\_36:  
(Start: 66 @34574 has 303 MA's), (Start: 85 @34544 has 25 MA's), (97, 34499), (111, 34466),

Gene: KingVeVeVe\_45 Start: 39178, Stop: 38963, Start Num: 66  
Candidate Starts for KingVeVeVe\_45:  
(Start: 66 @39178 has 303 MA's), (Start: 85 @39148 has 25 MA's), (97, 39103),

Gene: Kita\_36 Start: 29363, Stop: 29127, Start Num: 73  
Candidate Starts for Kita\_36:  
(Start: 73 @29363 has 37 MA's), (Start: 93 @29321 has 4 MA's), (98, 29300), (110, 29258), (119, 29210), (130, 29138),

Gene: KlimbOn\_45 Start: 39191, Stop: 38976, Start Num: 66  
Candidate Starts for KlimbOn\_45:  
(Start: 66 @39191 has 303 MA's), (Start: 85 @39161 has 25 MA's), (97, 39116), (111, 39083),

Gene: Kloppinator\_45 Start: 39214, Stop: 38999, Start Num: 66  
Candidate Starts for Kloppinator\_45:  
(25, 39316), (Start: 66 @39214 has 303 MA's), (Start: 85 @39184 has 25 MA's), (97, 39139), (111, 39106),

Gene: Knocker\_45 Start: 40870, Stop: 40658, Start Num: 66  
Candidate Starts for Knocker\_45:  
(25, 40978), (Start: 66 @40870 has 303 MA's), (Start: 71 @40861 has 45 MA's), (87, 40837), (90, 40831), (Start: 93 @40816 has 4 MA's), (97, 40798),

Gene: Kolhan\_44 Start: 39436, Stop: 39230, Start Num: 71  
Candidate Starts for Kolhan\_44:  
(Start: 71 @39436 has 45 MA's), (Start: 86 @39409 has 3 MA's), (88, 39406), (104, 39352), (115, 39319),

Gene: Kronus\_42 Start: 39610, Stop: 39374, Start Num: 56  
Candidate Starts for Kronus\_42:  
(Start: 56 @39610 has 59 MA's), (88, 39553), (107, 39487), (111, 39481),

Gene: Kuleana\_27 Start: 19065, Stop: 18880, Start Num: 85  
Candidate Starts for Kuleana\_27:  
(78, 19077), (Start: 85 @19065 has 25 MA's),

Gene: Kwadwo\_44 Start: 38895, Stop: 38680, Start Num: 66  
Candidate Starts for Kwadwo\_44:  
(Start: 66 @38895 has 303 MA's), (Start: 85 @38865 has 25 MA's), (97, 38820), (111, 38787),

Gene: Kwksand96\_44 Start: 38764, Stop: 38549, Start Num: 66  
Candidate Starts for Kwksand96\_44:  
(Start: 66 @38764 has 303 MA's), (Start: 85 @38734 has 25 MA's), (97, 38689), (111, 38656),

Gene: Labeouficaum\_44 Start: 38759, Stop: 38544, Start Num: 66  
Candidate Starts for Labeouficaum\_44:  
(Start: 66 @38759 has 303 MA's), (Start: 85 @38729 has 25 MA's), (97, 38684), (111, 38651),

Gene: Lambano\_39 Start: 38183, Stop: 37977, Start Num: 67

Candidate Starts for Lambano\_39:

(Start: 67 @38183 has 26 MA's), (Start: 85 @38162 has 25 MA's), (Start: 93 @38135 has 4 MA's), (97, 38117), (104, 38099), (114, 38069), (116, 38063), (121, 38042),

Gene: Lars\_44 Start: 39547, Stop: 39341, Start Num: 71

Candidate Starts for Lars\_44:

(Start: 71 @39547 has 45 MA's), (Start: 86 @39520 has 3 MA's), (88, 39517), (104, 39463), (115, 39430),

Gene: Larson\_46 Start: 39308, Stop: 39093, Start Num: 66

Candidate Starts for Larson\_46:

(25, 39410), (Start: 66 @39308 has 303 MA's), (Start: 85 @39278 has 25 MA's), (97, 39233),

Gene: LasagnaCat\_45 Start: 39197, Stop: 38982, Start Num: 66

Candidate Starts for LasagnaCat\_45:

(25, 39299), (Start: 66 @39197 has 303 MA's), (Start: 85 @39167 has 25 MA's), (97, 39122),

Gene: Lasso\_45 Start: 39170, Stop: 38955, Start Num: 66

Candidate Starts for Lasso\_45:

(Start: 66 @39170 has 303 MA's), (Start: 85 @39140 has 25 MA's), (97, 39095),

Gene: Laurie\_43 Start: 38946, Stop: 38740, Start Num: 71

Candidate Starts for Laurie\_43:

(Start: 71 @38946 has 45 MA's), (Start: 86 @38919 has 3 MA's), (88, 38916), (104, 38862), (115, 38829),

Gene: LeeLot\_45 Start: 39201, Stop: 38986, Start Num: 66

Candidate Starts for LeeLot\_45:

(25, 39303), (Start: 66 @39201 has 303 MA's), (Start: 85 @39171 has 25 MA's), (97, 39126),

Gene: Lego3393\_44 Start: 39206, Stop: 38991, Start Num: 66

Candidate Starts for Lego3393\_44:

(25, 39308), (Start: 66 @39206 has 303 MA's), (Start: 85 @39176 has 25 MA's), (97, 39131),

Gene: Legolas\_44 Start: 38911, Stop: 38696, Start Num: 66

Candidate Starts for Legolas\_44:

(Start: 66 @38911 has 303 MA's), (Start: 85 @38881 has 25 MA's), (97, 38836), (111, 38803),

Gene: Lehmann\_45 Start: 38734, Stop: 38519, Start Num: 66

Candidate Starts for Lehmann\_45:

(Start: 66 @38734 has 303 MA's), (Start: 85 @38704 has 25 MA's), (97, 38659), (111, 38626),

Gene: LeiMonet\_45 Start: 38902, Stop: 38687, Start Num: 66

Candidate Starts for LeiMonet\_45:

(25, 39004), (Start: 66 @38902 has 303 MA's), (Start: 85 @38872 has 25 MA's), (97, 38827),

Gene: LemonSlice\_45 Start: 38898, Stop: 38683, Start Num: 66

Candidate Starts for LemonSlice\_45:

(25, 39000), (Start: 66 @38898 has 303 MA's), (Start: 85 @38868 has 25 MA's), (97, 38823),

Gene: Leona\_25 Start: 18655, Stop: 18440, Start Num: 85

Candidate Starts for Leona\_25:

(26, 18790), (38, 18736), (78, 18667), (Start: 85 @18655 has 25 MA's),

Gene: Lephleur\_44 Start: 39440, Stop: 39234, Start Num: 71

Candidate Starts for Lephleur\_44:

(Start: 71 @39440 has 45 MA's), (Start: 86 @39413 has 3 MA's), (88, 39410), (104, 39356), (115, 39323),

Gene: Leroy\_39 Start: 30561, Stop: 30325, Start Num: 73

Candidate Starts for Leroy\_39:

(Start: 73 @30561 has 37 MA's), (Start: 93 @30519 has 4 MA's), (98, 30498), (110, 30456), (119, 30408),

Gene: LestyG\_43 Start: 39031, Stop: 38795, Start Num: 56

Candidate Starts for LestyG\_43:

(Start: 56 @39031 has 59 MA's), (88, 38974), (107, 38908), (111, 38902),

Gene: Ligma\_38 Start: 32837, Stop: 32601, Start Num: 48

Candidate Starts for Ligma\_38:

(46, 32840), (Start: 48 @32837 has 5 MA's), (63, 32816), (Start: 67 @32810 has 26 MA's), (83, 32786), (88, 32780), (115, 32690),

Gene: LilMcDreamy\_41 Start: 38754, Stop: 38542, Start Num: 66

Candidate Starts for LilMcDreamy\_41:

(25, 38862), (Start: 66 @38754 has 303 MA's), (Start: 85 @38736 has 25 MA's), (97, 38691), (116, 38637),

Gene: LilSmirk\_44 Start: 39434, Stop: 39228, Start Num: 71

Candidate Starts for LilSmirk\_44:

(Start: 71 @39434 has 45 MA's), (Start: 86 @39407 has 3 MA's), (88, 39404), (104, 39350), (115, 39317),

Gene: Linus\_37 Start: 30384, Stop: 30166, Start Num: 79

Candidate Starts for Linus\_37:

(21, 30534), (28, 30489), (29, 30486), (42, 30447), (61, 30414), (Start: 79 @30384 has 19 MA's), (89, 30363), (97, 30327), (101, 30312), (105, 30297), (111, 30285),

Gene: LittleDigger\_39 Start: 38205, Stop: 37999, Start Num: 67

Candidate Starts for LittleDigger\_39:

(Start: 67 @38205 has 26 MA's), (Start: 85 @38184 has 25 MA's), (Start: 93 @38157 has 4 MA's), (97, 38139), (104, 38121), (114, 38091), (116, 38085), (121, 38064),

Gene: LittleMinkey\_49 Start: 38461, Stop: 38246, Start Num: 68

Candidate Starts for LittleMinkey\_49:

(Start: 68 @38461 has 3 MA's), (Start: 85 @38437 has 25 MA's), (99, 38383), (126, 38287),

Gene: LittleMunchkin\_40 Start: 36172, Stop: 35945, Start Num: 53

Candidate Starts for LittleMunchkin\_40:

(Start: 53 @36172 has 5 MA's), (108, 36055), (116, 36031),

Gene: LizLemon\_44 Start: 39556, Stop: 39350, Start Num: 71

Candidate Starts for LizLemon\_44:

(Start: 71 @39556 has 45 MA's), (Start: 86 @39529 has 3 MA's), (88, 39526), (104, 39472), (115, 39439),

Gene: Lolalove\_40 Start: 39208, Stop: 39002, Start Num: 67  
Candidate Starts for Lolalove\_40:  
(Start: 67 @39208 has 26 MA's), (Start: 85 @39187 has 25 MA's), (Start: 93 @39160 has 4 MA's), (97, 39142), (104, 39124), (114, 39094), (116, 39088),

Gene: LonelyBoi\_35 Start: 30866, Stop: 30690, Start Num: 77  
Candidate Starts for LonelyBoi\_35:  
(Start: 77 @30866 has 1 MA's), (91, 30851), (96, 30824),

Gene: Longacauda\_44 Start: 38903, Stop: 38688, Start Num: 66  
Candidate Starts for Longacauda\_44:  
(Start: 66 @38903 has 303 MA's), (Start: 85 @38873 has 25 MA's), (97, 38828), (111, 38795),

Gene: Lopsy\_44 Start: 38753, Stop: 38538, Start Num: 66  
Candidate Starts for Lopsy\_44:  
(25, 38855), (Start: 66 @38753 has 303 MA's), (Start: 85 @38723 has 25 MA's), (97, 38678),

Gene: Losacky\_54 Start: 32783, Stop: 33049, Start Num: 58  
Candidate Starts for Losacky\_54:  
(20, 32639), (Start: 52 @32774 has 9 MA's), (Start: 58 @32783 has 2 MA's), (89, 32840), (94, 32864), (96, 32870), (120, 32963),

Gene: LostAndPhound\_44 Start: 38904, Stop: 38689, Start Num: 66  
Candidate Starts for LostAndPhound\_44:  
(25, 39006), (Start: 66 @38904 has 303 MA's), (Start: 85 @38874 has 25 MA's), (97, 38829),

Gene: LuckyMarjie\_44 Start: 38913, Stop: 38698, Start Num: 66  
Candidate Starts for LuckyMarjie\_44:  
(Start: 66 @38913 has 303 MA's), (Start: 85 @38883 has 25 MA's), (97, 38838), (111, 38805),

Gene: Lukepolites\_69 Start: 44405, Stop: 44190, Start Num: 73  
Candidate Starts for Lukepolites\_69:  
(Start: 73 @44405 has 37 MA's),

Gene: Lulumae\_44 Start: 38895, Stop: 38680, Start Num: 66  
Candidate Starts for Lulumae\_44:  
(Start: 66 @38895 has 303 MA's), (Start: 85 @38865 has 25 MA's), (97, 38820), (111, 38787),

Gene: Lulwa\_45 Start: 39182, Stop: 38967, Start Num: 66  
Candidate Starts for Lulwa\_45:  
(25, 39284), (Start: 66 @39182 has 303 MA's), (Start: 85 @39152 has 25 MA's), (97, 39107),

Gene: Lumine\_44 Start: 38891, Stop: 38676, Start Num: 66  
Candidate Starts for Lumine\_44:  
(25, 38993), (Start: 66 @38891 has 303 MA's), (Start: 85 @38861 has 25 MA's), (97, 38816),

Gene: Lunar\_27 Start: 19041, Stop: 18820, Start Num: 85  
Candidate Starts for Lunar\_27:  
(Start: 85 @19041 has 25 MA's),

Gene: Lutum\_39 Start: 29550, Stop: 29314, Start Num: 73  
Candidate Starts for Lutum\_39:

(Start: 73 @29550 has 37 MA's), (Start: 93 @29508 has 4 MA's), (98, 29487), (110, 29445), (119, 29397),

Gene: Lymara\_37 Start: 30202, Stop: 29981, Start Num: 79

Candidate Starts for Lymara\_37:

(21, 30352), (28, 30307), (42, 30265), (61, 30232), (Start: 79 @30202 has 19 MA's), (95, 30154), (101, 30130), (105, 30115), (111, 30103),

Gene: MRabcd\_44 Start: 38895, Stop: 38680, Start Num: 66

Candidate Starts for MRabcd\_44:

(Start: 66 @38895 has 303 MA's), (Start: 85 @38865 has 25 MA's), (97, 38820), (111, 38787),

Gene: Madiba\_23 Start: 24209, Stop: 24036, Start Num: 75

Candidate Starts for Madiba\_23:

(Start: 59 @24239 has 1 MA's), (Start: 71 @24215 has 45 MA's), (Start: 75 @24209 has 2 MA's), (Start: 93 @24182 has 4 MA's), (103, 24149), (125, 24053),

Gene: Mag7\_44 Start: 38801, Stop: 38586, Start Num: 66

Candidate Starts for Mag7\_44:

(Start: 66 @38801 has 303 MA's), (Start: 85 @38771 has 25 MA's), (97, 38726),

Gene: Magic8\_45 Start: 39236, Stop: 39021, Start Num: 66

Candidate Starts for Magic8\_45:

(Start: 66 @39236 has 303 MA's), (Start: 85 @39206 has 25 MA's), (97, 39161),

Gene: Magpie\_39 Start: 39044, Stop: 38838, Start Num: 67

Candidate Starts for Magpie\_39:

(Start: 67 @39044 has 26 MA's), (Start: 85 @39023 has 25 MA's), (Start: 93 @38996 has 4 MA's), (97, 38978), (104, 38960), (114, 38930), (116, 38924),

Gene: MakoManhole\_40 Start: 34842, Stop: 34588, Start Num: 56

Candidate Starts for MakoManhole\_40:

(31, 34884), (Start: 56 @34842 has 59 MA's), (Start: 86 @34794 has 3 MA's), (99, 34743), (107, 34725), (116, 34698),

Gene: Mana\_44 Start: 38910, Stop: 38695, Start Num: 66

Candidate Starts for Mana\_44:

(Start: 66 @38910 has 303 MA's), (Start: 85 @38880 has 25 MA's), (97, 38835), (111, 38802),

Gene: Manad\_44 Start: 38752, Stop: 38537, Start Num: 66

Candidate Starts for Manad\_44:

(25, 38854), (Start: 66 @38752 has 303 MA's), (Start: 85 @38722 has 25 MA's), (97, 38677),

Gene: Manasvini\_35 Start: 29355, Stop: 29119, Start Num: 73

Candidate Starts for Manasvini\_35:

(Start: 73 @29355 has 37 MA's), (Start: 93 @29313 has 4 MA's), (98, 29292), (110, 29250), (119, 29202), (130, 29130),

Gene: Maridalia\_34 Start: 29354, Stop: 29118, Start Num: 73

Candidate Starts for Maridalia\_34:

(Start: 73 @29354 has 37 MA's), (Start: 93 @29312 has 4 MA's), (98, 29291), (110, 29249), (119, 29201), (130, 29129),

Gene: Mariel\_55 Start: 32980, Stop: 33258, Start Num: 52

Candidate Starts for Mariel\_55:

(20, 32845), (Start: 52 @32980 has 9 MA's), (Start: 58 @32989 has 2 MA's), (89, 33049), (94, 33073), (96, 33079), (120, 33172),

Gene: Mariokart\_38 Start: 32762, Stop: 32526, Start Num: 48

Candidate Starts for Mariokart\_38:

(41, 32777), (46, 32765), (Start: 48 @32762 has 5 MA's), (83, 32711), (88, 32705), (115, 32615),

Gene: Marley1013\_43 Start: 39809, Stop: 39573, Start Num: 56

Candidate Starts for Marley1013\_43:

(Start: 56 @39809 has 59 MA's), (88, 39752), (107, 39686), (111, 39680),

Gene: Marlia\_43 Start: 39012, Stop: 38776, Start Num: 56

Candidate Starts for Marlia\_43:

(Start: 56 @39012 has 59 MA's), (88, 38955), (107, 38889), (111, 38883),

Gene: Maru\_44 Start: 38853, Stop: 38638, Start Num: 66

Candidate Starts for Maru\_44:

(Start: 66 @38853 has 303 MA's), (Start: 85 @38823 has 25 MA's), (97, 38778), (111, 38745),

Gene: Maruru\_94 Start: 57349, Stop: 57080, Start Num: 51

Candidate Starts for Maruru\_94:

(Start: 51 @57349 has 2 MA's), (Start: 56 @57343 has 59 MA's), (60, 57337), (65, 57325), (Start: 75 @57310 has 2 MA's), (Start: 77 @57307 has 1 MA's), (Start: 92 @57274 has 1 MA's), (94, 57259),

Gene: Maskar\_44 Start: 38747, Stop: 38532, Start Num: 66

Candidate Starts for Maskar\_44:

(Start: 66 @38747 has 303 MA's), (Start: 85 @38717 has 25 MA's), (97, 38672), (111, 38639),

Gene: MasterPo\_44 Start: 39443, Stop: 39237, Start Num: 71

Candidate Starts for MasterPo\_44:

(Start: 71 @39443 has 45 MA's), (Start: 86 @39416 has 3 MA's), (88, 39413), (104, 39359), (115, 39326),

Gene: Matalotodo\_45 Start: 39196, Stop: 38981, Start Num: 66

Candidate Starts for Matalotodo\_45:

(Start: 66 @39196 has 303 MA's), (Start: 85 @39166 has 25 MA's), (97, 39121),

Gene: Mcshane\_44 Start: 38893, Stop: 38678, Start Num: 66

Candidate Starts for Mcshane\_44:

(Start: 66 @38893 has 303 MA's), (Start: 85 @38863 has 25 MA's), (97, 38818), (111, 38785),

Gene: Mecca\_44 Start: 38896, Stop: 38681, Start Num: 66

Candidate Starts for Mecca\_44:

(25, 38998), (Start: 66 @38896 has 303 MA's), (Start: 85 @38866 has 25 MA's), (97, 38821),

Gene: Megamind20\_45 Start: 38918, Stop: 38703, Start Num: 66

Candidate Starts for Megamind20\_45:

(25, 39020), (Start: 66 @38918 has 303 MA's), (Start: 85 @38888 has 25 MA's), (97, 38843),

Gene: Megatron\_45 Start: 39194, Stop: 38979, Start Num: 66

Candidate Starts for Megatron\_45:

(25, 39296), (Start: 66 @39194 has 303 MA's), (Start: 85 @39164 has 25 MA's), (97, 39119),

Gene: Melc17\_45 Start: 39191, Stop: 38976, Start Num: 66

Candidate Starts for Melc17\_45:

(Start: 66 @39191 has 303 MA's), (Start: 85 @39161 has 25 MA's), (97, 39116),

Gene: Melons\_27 Start: 19041, Stop: 18820, Start Num: 85

Candidate Starts for Melons\_27:

(Start: 85 @19041 has 25 MA's),

Gene: MelsMeow\_44 Start: 38797, Stop: 38582, Start Num: 66

Candidate Starts for MelsMeow\_44:

(Start: 66 @38797 has 303 MA's), (Start: 85 @38767 has 25 MA's), (97, 38722), (111, 38689),

Gene: MenE\_54 Start: 32665, Stop: 32940, Start Num: 52

Candidate Starts for MenE\_54:

(20, 32530), (Start: 52 @32665 has 9 MA's), (Start: 58 @32674 has 2 MA's), (89, 32731), (94, 32755), (96, 32761), (120, 32854),

Gene: Mesh1\_45 Start: 39208, Stop: 38993, Start Num: 66

Candidate Starts for Mesh1\_45:

(Start: 66 @39208 has 303 MA's), (Start: 85 @39178 has 25 MA's), (97, 39133),

Gene: Mesmerelda\_44 Start: 38906, Stop: 38691, Start Num: 66

Candidate Starts for Mesmerelda\_44:

(25, 39008), (Start: 66 @38906 has 303 MA's), (Start: 85 @38876 has 25 MA's), (97, 38831),

Gene: MichaelPhcott\_44 Start: 38798, Stop: 38583, Start Num: 66

Candidate Starts for MichaelPhcott\_44:

(Start: 66 @38798 has 303 MA's), (Start: 85 @38768 has 25 MA's), (97, 38723),

Gene: Mikota\_45 Start: 39181, Stop: 38966, Start Num: 66

Candidate Starts for Mikota\_45:

(Start: 66 @39181 has 303 MA's), (Start: 85 @39151 has 25 MA's), (97, 39106), (111, 39073),

Gene: MiniBoss\_45 Start: 39187, Stop: 38972, Start Num: 66

Candidate Starts for MiniBoss\_45:

(Start: 66 @39187 has 303 MA's), (Start: 85 @39157 has 25 MA's), (97, 39112), (111, 39079),

Gene: MitKao\_45 Start: 38902, Stop: 38687, Start Num: 66

Candidate Starts for MitKao\_45:

(25, 39004), (Start: 66 @38902 has 303 MA's), (Start: 85 @38872 has 25 MA's), (97, 38827),

Gene: Mithril\_40 Start: 39212, Stop: 39006, Start Num: 67

Candidate Starts for Mithril\_40:

(Start: 67 @39212 has 26 MA's), (Start: 85 @39191 has 25 MA's), (Start: 93 @39164 has 4 MA's), (97, 39146), (104, 39128), (114, 39098), (116, 39092),

Gene: MmasiCarm\_43 Start: 39013, Stop: 38777, Start Num: 56

Candidate Starts for MmasiCarm\_43:

(Start: 56 @39013 has 59 MA's), (88, 38956), (107, 38890), (111, 38884),

Gene: Mocha12\_30 Start: 25663, Stop: 25463, Start Num: 69

Candidate Starts for Mocha12\_30:

(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: Mordred\_37 Start: 30383, Stop: 30165, Start Num: 79

Candidate Starts for Mordred\_37:

(21, 30533), (28, 30488), (29, 30485), (42, 30446), (61, 30413), (Start: 79 @30383 has 19 MA's), (89, 30362), (97, 30326), (101, 30311), (105, 30296), (111, 30284),

Gene: Morgushi\_45 Start: 38903, Stop: 38688, Start Num: 66

Candidate Starts for Morgushi\_45:

(Start: 66 @38903 has 303 MA's), (Start: 85 @38873 has 25 MA's), (97, 38828), (111, 38795),

Gene: Mortcellus\_42 Start: 39665, Stop: 39429, Start Num: 56

Candidate Starts for Mortcellus\_42:

(Start: 56 @39665 has 59 MA's), (88, 39608), (107, 39542), (111, 39536),

Gene: Morty\_45 Start: 39203, Stop: 38988, Start Num: 66

Candidate Starts for Morty\_45:

(25, 39305), (Start: 66 @39203 has 303 MA's), (Start: 85 @39173 has 25 MA's), (97, 39128),

Gene: Morty007\_43 Start: 39809, Stop: 39573, Start Num: 56

Candidate Starts for Morty007\_43:

(Start: 56 @39809 has 59 MA's), (88, 39752), (107, 39686), (111, 39680),

Gene: Mosaic\_44 Start: 38908, Stop: 38693, Start Num: 66

Candidate Starts for Mosaic\_44:

(25, 39010), (Start: 66 @38908 has 303 MA's), (Start: 85 @38878 has 25 MA's), (97, 38833),

Gene: MossRose\_40 Start: 34821, Stop: 34567, Start Num: 56

Candidate Starts for MossRose\_40:

(31, 34863), (Start: 56 @34821 has 59 MA's), (Start: 86 @34773 has 3 MA's), (99, 34722), (107, 34704), (116, 34677),

Gene: MoyaNatalis\_37 Start: 30387, Stop: 30169, Start Num: 79

Candidate Starts for MoyaNatalis\_37:

(21, 30537), (28, 30492), (29, 30489), (42, 30450), (61, 30417), (Start: 79 @30387 has 19 MA's), (89, 30366), (97, 30330), (101, 30315), (105, 30300), (111, 30288),

Gene: MrPhizzler\_45 Start: 38911, Stop: 38696, Start Num: 66

Candidate Starts for MrPhizzler\_45:

(Start: 66 @38911 has 303 MA's), (Start: 85 @38881 has 25 MA's), (97, 38836), (111, 38803),

Gene: Mudslide\_40 Start: 39444, Stop: 39238, Start Num: 67

Candidate Starts for Mudslide\_40:

(Start: 67 @39444 has 26 MA's), (Start: 85 @39423 has 25 MA's), (Start: 93 @39396 has 4 MA's), (97, 39378), (104, 39360), (114, 39330), (116, 39324),

Gene: Mufasa8\_98 Start: 57231, Stop: 56944, Start Num: 40

Candidate Starts for Mufasa8\_98:

(Start: 40 @57231 has 1 MA's), (44, 57222), (65, 57186), (Start: 75 @57171 has 2 MA's), (111, 57057), (115, 57039),

Gene: Mulan\_44 Start: 38920, Stop: 38705, Start Num: 66

Candidate Starts for Mulan\_44:

(Start: 66 @38920 has 303 MA's), (Start: 85 @38890 has 25 MA's), (97, 38845),

Gene: Mulaychimus\_43 Start: 38995, Stop: 38759, Start Num: 56

Candidate Starts for Mulaychimus\_43:

(Start: 56 @38995 has 59 MA's), (88, 38938), (107, 38872), (111, 38866),

Gene: Murdoc\_45 Start: 39195, Stop: 38980, Start Num: 66

Candidate Starts for Murdoc\_45:

(Start: 66 @39195 has 303 MA's), (Start: 85 @39165 has 25 MA's), (97, 39120), (111, 39087),

Gene: Mutante\_44 Start: 38902, Stop: 38687, Start Num: 66

Candidate Starts for Mutante\_44:

(25, 39004), (Start: 66 @38902 has 303 MA's), (Start: 85 @38872 has 25 MA's), (97, 38827),

Gene: Mysterious\_43 Start: 39920, Stop: 39711, Start Num: 66

Candidate Starts for Mysterious\_43:

(25, 40028), (Start: 66 @39920 has 303 MA's), (Start: 85 @39905 has 25 MA's), (97, 39860),

Gene: NCRodriguez\_54 Start: 32734, Stop: 33009, Start Num: 52

Candidate Starts for NCRodriguez\_54:

(4, 32251), (5, 32278), (20, 32599), (Start: 52 @32734 has 9 MA's), (Start: 58 @32743 has 2 MA's), (89, 32800), (94, 32824), (96, 32830), (120, 32923),

Gene: NHagos\_38 Start: 33445, Stop: 33185, Start Num: 56

Candidate Starts for NHagos\_38:

(34, 33478), (Start: 56 @33445 has 59 MA's), (Start: 85 @33403 has 25 MA's), (Start: 86 @33400 has 3 MA's), (99, 33349), (107, 33331), (116, 33304),

Gene: Nacho\_0045 Start: 39197, Stop: 38982, Start Num: 66

Candidate Starts for Nacho\_0045:

(25, 39299), (Start: 66 @39197 has 303 MA's), (Start: 85 @39167 has 25 MA's), (97, 39122),

Gene: Nanao\_39 Start: 38170, Stop: 37964, Start Num: 67

Candidate Starts for Nanao\_39:

(Start: 67 @38170 has 26 MA's), (Start: 85 @38149 has 25 MA's), (Start: 93 @38122 has 4 MA's), (97, 38104), (104, 38086), (114, 38056), (116, 38050), (121, 38029),

Gene: Nangang\_43 Start: 39713, Stop: 39504, Start Num: 66

Candidate Starts for Nangang\_43:

(25, 39821), (Start: 66 @39713 has 303 MA's), (Start: 85 @39698 has 25 MA's), (91, 39686),

Gene: Nathan\_45 Start: 39233, Stop: 39018, Start Num: 66

Candidate Starts for Nathan\_45:

(Start: 66 @39233 has 303 MA's), (Start: 85 @39203 has 25 MA's), (97, 39158), (111, 39125),

Gene: Nehemiah\_43 Start: 39920, Stop: 39711, Start Num: 66

Candidate Starts for Nehemiah\_43:

(25, 40028), (Start: 66 @39920 has 303 MA's), (Start: 85 @39905 has 25 MA's), (97, 39860),

Gene: Neobush\_35 Start: 29354, Stop: 29118, Start Num: 73

Candidate Starts for Neobush\_35:

(Start: 73 @29354 has 37 MA's), (Start: 93 @29312 has 4 MA's), (98, 29291), (110, 29249), (119, 29201), (130, 29129),

Gene: Neos5\_43 Start: 39824, Stop: 39588, Start Num: 56

Candidate Starts for Neos5\_43:

(Start: 56 @39824 has 59 MA's), (88, 39767), (107, 39701), (111, 39695),

Gene: Newman\_45 Start: 39194, Stop: 38979, Start Num: 66

Candidate Starts for Newman\_45:

(Start: 66 @39194 has 303 MA's), (Start: 85 @39164 has 25 MA's), (97, 39119), (111, 39086),

Gene: Nicole21\_45 Start: 39192, Stop: 38977, Start Num: 66

Candidate Starts for Nicole21\_45:

(Start: 66 @39192 has 303 MA's), (Start: 85 @39162 has 25 MA's), (97, 39117),

Gene: Nigel\_39 Start: 38086, Stop: 37880, Start Num: 67

Candidate Starts for Nigel\_39:

(Start: 67 @38086 has 26 MA's), (Start: 85 @38065 has 25 MA's), (Start: 93 @38038 has 4 MA's), (97, 38020), (104, 38002), (114, 37972), (116, 37966),

Gene: Nozo\_43 Start: 39789, Stop: 39553, Start Num: 56

Candidate Starts for Nozo\_43:

(Start: 56 @39789 has 59 MA's), (88, 39732), (107, 39666), (111, 39660),

Gene: Numberten\_45 Start: 39201, Stop: 38986, Start Num: 66

Candidate Starts for Numberten\_45:

(25, 39303), (Start: 66 @39201 has 303 MA's), (Start: 85 @39171 has 25 MA's), (97, 39126),

Gene: Nyala\_44 Start: 38894, Stop: 38679, Start Num: 66

Candidate Starts for Nyala\_44:

(25, 38996), (Start: 66 @38894 has 303 MA's), (Start: 85 @38864 has 25 MA's), (97, 38819),

Gene: Nymphadora\_34 Start: 29521, Stop: 29285, Start Num: 73

Candidate Starts for Nymphadora\_34:

(Start: 73 @29521 has 37 MA's), (Start: 93 @29479 has 4 MA's), (110, 29416), (119, 29368), (121, 29356),

Gene: ODay\_42 Start: 31024, Stop: 30788, Start Num: 73

Candidate Starts for ODay\_42:

(Start: 73 @31024 has 37 MA's), (Start: 93 @30982 has 4 MA's), (98, 30961), (110, 30919), (119, 30871),

Gene: OSmaximus\_45 Start: 39236, Stop: 39021, Start Num: 66

Candidate Starts for OSmaximus\_45:

(Start: 66 @39236 has 303 MA's), (Start: 85 @39206 has 25 MA's), (97, 39161), (111, 39128),

Gene: Obutu\_43 Start: 39013, Stop: 38777, Start Num: 56

Candidate Starts for Obutu\_43:

(Start: 56 @39013 has 59 MA's), (88, 38956), (107, 38890), (111, 38884),

Gene: Ogopogo\_25 Start: 24675, Stop: 24496, Start Num: 71

Candidate Starts for Ogopogo\_25:

(Start: 59 @24699 has 1 MA's), (Start: 71 @24675 has 45 MA's), (Start: 75 @24669 has 2 MA's),  
(Start: 93 @24642 has 4 MA's), (103, 24609), (125, 24513),

Gene: Olak\_44 Start: 38897, Stop: 38682, Start Num: 66

Candidate Starts for Olak\_44:

(25, 38999), (Start: 66 @38897 has 303 MA's), (Start: 85 @38867 has 25 MA's), (97, 38822),

Gene: Oline\_44 Start: 38763, Stop: 38548, Start Num: 66

Candidate Starts for Oline\_44:

(25, 38865), (Start: 66 @38763 has 303 MA's), (Start: 85 @38733 has 25 MA's), (97, 38688),

Gene: Olive\_45 Start: 39184, Stop: 38969, Start Num: 66

Candidate Starts for Olive\_45:

(25, 39286), (Start: 66 @39184 has 303 MA's), (Start: 85 @39154 has 25 MA's), (97, 39109),

Gene: OliverWalter\_45 Start: 39206, Stop: 38991, Start Num: 66

Candidate Starts for OliverWalter\_45:

(Start: 66 @39206 has 303 MA's), (Start: 85 @39176 has 25 MA's), (97, 39131),

Gene: Olivio\_42 Start: 38882, Stop: 38646, Start Num: 56

Candidate Starts for Olivio\_42:

(Start: 56 @38882 has 59 MA's), (88, 38825), (107, 38759), (111, 38753),

Gene: Omniscient\_45 Start: 39203, Stop: 38988, Start Num: 66

Candidate Starts for Omniscient\_45:

(25, 39305), (Start: 66 @39203 has 303 MA's), (Start: 85 @39173 has 25 MA's), (97, 39128),

Gene: OneBrain\_46 Start: 38902, Stop: 38687, Start Num: 66

Candidate Starts for OneBrain\_46:

(25, 39004), (Start: 66 @38902 has 303 MA's), (Start: 85 @38872 has 25 MA's), (97, 38827),

Gene: Oosterbaan\_45 Start: 39194, Stop: 38979, Start Num: 66

Candidate Starts for Oosterbaan\_45:

(Start: 66 @39194 has 303 MA's), (Start: 85 @39164 has 25 MA's), (97, 39119),

Gene: Opia\_44 Start: 39429, Stop: 39223, Start Num: 71

Candidate Starts for Opia\_44:

(Start: 71 @39429 has 45 MA's), (Start: 86 @39402 has 3 MA's), (88, 39399), (104, 39345), (115, 39312),

Gene: OrangeOswald\_43 Start: 39030, Stop: 38794, Start Num: 56

Candidate Starts for OrangeOswald\_43:

(Start: 56 @39030 has 59 MA's), (88, 38973), (107, 38907), (111, 38901),

Gene: Orcanus\_26 Start: 19951, Stop: 19748, Start Num: 85

Candidate Starts for Orcanus\_26:

(Start: 85 @19951 has 25 MA's),

Gene: Orfeu\_44 Start: 38902, Stop: 38687, Start Num: 66

Candidate Starts for Orfeu\_44:

(Start: 66 @38902 has 303 MA's), (Start: 85 @38872 has 25 MA's), (97, 38827), (111, 38794),

Gene: Orion\_45 Start: 39192, Stop: 38977, Start Num: 66

Candidate Starts for Orion\_45:  
(25, 39294), (Start: 66 @39192 has 303 MA's), (Start: 85 @39162 has 25 MA's), (97, 39117),

Gene: Orwigg\_44 Start: 38890, Stop: 38675, Start Num: 66  
Candidate Starts for Orwigg\_44:  
(Start: 66 @38890 has 303 MA's), (Start: 85 @38860 has 25 MA's), (97, 38815),

Gene: OtsoOtso\_26 Start: 18904, Stop: 18683, Start Num: 85  
Candidate Starts for OtsoOtso\_26:  
(Start: 85 @18904 has 25 MA's),

Gene: PG1\_45 Start: 39205, Stop: 38990, Start Num: 66  
Candidate Starts for PG1\_45:  
(25, 39307), (Start: 66 @39205 has 303 MA's), (Start: 85 @39175 has 25 MA's), (97, 39130),

Gene: Pacifista\_44 Start: 38896, Stop: 38681, Start Num: 66  
Candidate Starts for Pacifista\_44:  
(Start: 66 @38896 has 303 MA's), (Start: 85 @38866 has 25 MA's), (97, 38821), (111, 38788),

Gene: PallasAthena\_45 Start: 38907, Stop: 38692, Start Num: 66  
Candidate Starts for PallasAthena\_45:  
(Start: 66 @38907 has 303 MA's), (Start: 85 @38877 has 25 MA's), (97, 38832), (111, 38799),

Gene: PenguinLover67\_46 Start: 41013, Stop: 40795, Start Num: 66  
Candidate Starts for PenguinLover67\_46:  
(25, 41109), (Start: 66 @41013 has 303 MA's), (Start: 85 @40980 has 25 MA's), (Start: 93 @40953 has 4 MA's), (97, 40935), (126, 40830),

Gene: Periwinkle\_42 Start: 31005, Stop: 30769, Start Num: 73  
Candidate Starts for Periwinkle\_42:  
(Start: 73 @31005 has 37 MA's), (Start: 93 @30963 has 4 MA's), (98, 30942), (110, 30900), (119, 30852),

Gene: Phabuloso\_36 Start: 29262, Stop: 29026, Start Num: 73  
Candidate Starts for Phabuloso\_36:  
(Start: 73 @29262 has 37 MA's), (Start: 93 @29220 has 4 MA's), (98, 29199), (110, 29157), (119, 29109),

Gene: Phaedrus\_41 Start: 38950, Stop: 38714, Start Num: 56  
Candidate Starts for Phaedrus\_41:  
(Start: 56 @38950 has 59 MA's), (88, 38893), (107, 38827), (111, 38821),

Gene: Phamished\_45 Start: 39200, Stop: 38985, Start Num: 66  
Candidate Starts for Phamished\_45:  
(Start: 66 @39200 has 303 MA's), (Start: 85 @39170 has 25 MA's), (97, 39125),

Gene: Phantasmagoria\_44 Start: 39441, Stop: 39235, Start Num: 71  
Candidate Starts for Phantasmagoria\_44:  
(Start: 71 @39441 has 45 MA's), (Start: 86 @39414 has 3 MA's), (88, 39411), (104, 39357), (115, 39324),

Gene: Phareon\_45 Start: 38904, Stop: 38689, Start Num: 66  
Candidate Starts for Phareon\_45:

(Start: 66 @38904 has 303 MA's), (Start: 85 @38874 has 25 MA's), (97, 38829), (111, 38796),

Gene: PhatCats2014\_45 Start: 39209, Stop: 38994, Start Num: 66

Candidate Starts for PhatCats2014\_45:

(25, 39311), (Start: 66 @39209 has 303 MA's), (Start: 85 @39179 has 25 MA's), (97, 39134),

Gene: PhatLouie\_45 Start: 39198, Stop: 38983, Start Num: 66

Candidate Starts for PhatLouie\_45:

(Start: 66 @39198 has 303 MA's), (Start: 85 @39168 has 25 MA's), (97, 39123),

Gene: Phayeta\_44 Start: 38895, Stop: 38659, Start Num: 56

Candidate Starts for Phayeta\_44:

(Start: 56 @38895 has 59 MA's), (88, 38838), (107, 38772), (111, 38766),

Gene: Phelemich\_43 Start: 39919, Stop: 39710, Start Num: 66

Candidate Starts for Phelemich\_43:

(25, 40027), (Start: 66 @39919 has 303 MA's), (Start: 85 @39904 has 25 MA's), (97, 39859),

Gene: PhenghisKhan\_44 Start: 38804, Stop: 38589, Start Num: 66

Candidate Starts for PhenghisKhan\_44:

(Start: 66 @38804 has 303 MA's), (Start: 85 @38774 has 25 MA's), (97, 38729),

Gene: Pherdinand\_45 Start: 39200, Stop: 38985, Start Num: 66

Candidate Starts for Pherdinand\_45:

(Start: 66 @39200 has 303 MA's), (Start: 85 @39170 has 25 MA's), (97, 39125), (111, 39092),

Gene: Phergie\_44 Start: 38795, Stop: 38580, Start Num: 66

Candidate Starts for Phergie\_44:

(Start: 66 @38795 has 303 MA's), (Start: 85 @38765 has 25 MA's), (97, 38720),

Gene: Philly\_42 Start: 38881, Stop: 38645, Start Num: 56

Candidate Starts for Philly\_42:

(Start: 56 @38881 has 59 MA's), (88, 38824), (107, 38758), (111, 38752),

Gene: PhillyJawn\_53 Start: 32405, Stop: 32680, Start Num: 52

Candidate Starts for PhillyJawn\_53:

(6, 32009), (8, 32084), (20, 32270), (Start: 52 @32405 has 9 MA's), (Start: 58 @32414 has 2 MA's), (89, 32471), (94, 32495), (96, 32501), (120, 32594),

Gene: Phingu\_55 Start: 32629, Stop: 32904, Start Num: 52

Candidate Starts for Phingu\_55:

(4, 32146), (5, 32173), (20, 32494), (Start: 52 @32629 has 9 MA's), (Start: 58 @32638 has 2 MA's), (89, 32695), (94, 32719), (96, 32725), (120, 32818),

Gene: Phipps\_45 Start: 39171, Stop: 38956, Start Num: 66

Candidate Starts for Phipps\_45:

(Start: 66 @39171 has 303 MA's), (Start: 85 @39141 has 25 MA's), (97, 39096),

Gene: Phistory\_39 Start: 29860, Stop: 29666, Start Num: 93

Candidate Starts for Phistory\_39:

(Start: 73 @29902 has 37 MA's), (Start: 93 @29860 has 4 MA's), (98, 29839), (110, 29797), (119, 29749),

Gene: Phleuron\_44 Start: 38801, Stop: 38586, Start Num: 66  
Candidate Starts for Phleuron\_44:  
(Start: 66 @38801 has 303 MA's), (Start: 85 @38771 has 25 MA's), (97, 38726),

Gene: PhluffyCoco\_26 Start: 18717, Stop: 18502, Start Num: 85  
Candidate Starts for PhluffyCoco\_26:  
(Start: 85 @18717 has 25 MA's),

Gene: Phlyer\_43 Start: 39769, Stop: 39533, Start Num: 56  
Candidate Starts for Phlyer\_43:  
(Start: 56 @39769 has 59 MA's), (88, 39712), (107, 39646), (111, 39640),

Gene: Phonegingi\_52 Start: 32447, Stop: 32722, Start Num: 52  
Candidate Starts for Phonegingi\_52:  
(4, 31964), (5, 31991), (20, 32312), (Start: 52 @32447 has 9 MA's), (Start: 58 @32456 has 2 MA's),  
(89, 32513), (94, 32537), (96, 32543),

Gene: PhrankReynolds\_43 Start: 38801, Stop: 38586, Start Num: 66  
Candidate Starts for PhrankReynolds\_43:  
(Start: 66 @38801 has 303 MA's), (Start: 85 @38771 has 25 MA's), (97, 38726),

Gene: PhrodoBaggins\_44 Start: 39188, Stop: 38973, Start Num: 66  
Candidate Starts for PhrodoBaggins\_44:  
(25, 39290), (Start: 66 @39188 has 303 MA's), (Start: 85 @39158 has 25 MA's), (97, 39113),

Gene: Phunky\_45 Start: 39201, Stop: 38986, Start Num: 66  
Candidate Starts for Phunky\_45:  
(Start: 66 @39201 has 303 MA's), (Start: 85 @39171 has 25 MA's), (97, 39126), (111, 39093),

Gene: Pickles13\_51 Start: 32723, Stop: 32998, Start Num: 52  
Candidate Starts for Pickles13\_51:  
(Start: 52 @32723 has 9 MA's), (Start: 58 @32732 has 2 MA's), (89, 32789), (94, 32813), (96, 32819),  
(120, 32912),

Gene: Piglet\_0044 Start: 39308, Stop: 39093, Start Num: 66  
Candidate Starts for Piglet\_0044:  
(Start: 66 @39308 has 303 MA's), (Start: 85 @39278 has 25 MA's), (97, 39233), (111, 39200),

Gene: Pine5\_39 Start: 32324, Stop: 32103, Start Num: 69  
Candidate Starts for Pine5\_39:  
(Start: 69 @32324 has 13 MA's), (91, 32294), (Start: 93 @32279 has 4 MA's), (116, 32210),

Gene: Pineda\_28 Start: 19194, Stop: 18973, Start Num: 85  
Candidate Starts for Pineda\_28:  
(Start: 85 @19194 has 25 MA's),

Gene: PinheadLarry\_45 Start: 38914, Stop: 38699, Start Num: 66  
Candidate Starts for PinheadLarry\_45:  
(Start: 66 @38914 has 303 MA's), (Start: 85 @38884 has 25 MA's), (97, 38839), (111, 38806),

Gene: Pinkman\_44 Start: 38757, Stop: 38542, Start Num: 66  
Candidate Starts for Pinkman\_44:  
(Start: 66 @38757 has 303 MA's), (Start: 85 @38727 has 25 MA's), (97, 38682), (111, 38649),

Gene: Pipefish\_45 Start: 40422, Stop: 40186, Start Num: 56  
Candidate Starts for Pipefish\_45:  
(Start: 56 @40422 has 59 MA's), (88, 40365), (107, 40299), (111, 40293),

Gene: Pipsqueak\_45 Start: 39199, Stop: 38984, Start Num: 66  
Candidate Starts for Pipsqueak\_45:  
(Start: 66 @39199 has 303 MA's), (Start: 85 @39169 has 25 MA's), (97, 39124),

Gene: Placalicious\_44 Start: 38892, Stop: 38677, Start Num: 66  
Candidate Starts for Placalicious\_44:  
(Start: 66 @38892 has 303 MA's), (Start: 85 @38862 has 25 MA's), (97, 38817),

Gene: Plata\_45 Start: 38913, Stop: 38698, Start Num: 66  
Candidate Starts for Plata\_45:  
(25, 39015), (Start: 66 @38913 has 303 MA's), (Start: 85 @38883 has 25 MA's), (97, 38838),

Gene: Plmatters\_45 Start: 39198, Stop: 38983, Start Num: 66  
Candidate Starts for Plmatters\_45:  
(25, 39300), (Start: 66 @39198 has 303 MA's), (Start: 85 @39168 has 25 MA's), (97, 39123), (111, 39090),

Gene: Podrick\_45 Start: 39189, Stop: 38974, Start Num: 66  
Candidate Starts for Podrick\_45:  
(25, 39291), (Start: 66 @39189 has 303 MA's), (Start: 85 @39159 has 25 MA's), (97, 39114),

Gene: Polka\_26 Start: 18904, Stop: 18683, Start Num: 85  
Candidate Starts for Polka\_26:  
(Start: 85 @18904 has 25 MA's),

Gene: Polly\_32 Start: 28797, Stop: 28561, Start Num: 73  
Candidate Starts for Polly\_32:  
(Start: 73 @28797 has 37 MA's), (Start: 93 @28755 has 4 MA's), (98, 28734), (110, 28692), (119, 28644), (130, 28572),

Gene: Pollywog\_25 Start: 25545, Stop: 25366, Start Num: 71  
Candidate Starts for Pollywog\_25:  
(Start: 59 @25569 has 1 MA's), (Start: 71 @25545 has 45 MA's), (Start: 75 @25539 has 2 MA's), (Start: 93 @25512 has 4 MA's), (103, 25479), (125, 25383),

Gene: Pops\_45 Start: 39213, Stop: 38998, Start Num: 66  
Candidate Starts for Pops\_45:  
(25, 39315), (Start: 66 @39213 has 303 MA's), (Start: 85 @39183 has 25 MA's), (97, 39138), (111, 39105),

Gene: Poster\_39 Start: 38171, Stop: 37965, Start Num: 67  
Candidate Starts for Poster\_39:  
(Start: 67 @38171 has 26 MA's), (Start: 85 @38150 has 25 MA's), (Start: 93 @38123 has 4 MA's), (97, 38105), (104, 38087), (114, 38057), (116, 38051), (121, 38030),

Gene: Potter\_44 Start: 38913, Stop: 38698, Start Num: 66  
Candidate Starts for Potter\_44:  
(25, 39015), (Start: 66 @38913 has 303 MA's), (Start: 85 @38883 has 25 MA's), (97, 38838),

Gene: Prickles\_45 Start: 39189, Stop: 38974, Start Num: 66

Candidate Starts for Prickles\_45:

(Start: 66 @39189 has 303 MA's), (Start: 85 @39159 has 25 MA's), (97, 39114),

Gene: Prince\_40 Start: 39354, Stop: 39148, Start Num: 67

Candidate Starts for Prince\_40:

(Start: 67 @39354 has 26 MA's), (Start: 85 @39333 has 25 MA's), (Start: 93 @39306 has 4 MA's), (97, 39288), (104, 39270), (114, 39240), (116, 39234),

Gene: PrinceCharming\_44 Start: 39549, Stop: 39343, Start Num: 71

Candidate Starts for PrinceCharming\_44:

(Start: 71 @39549 has 45 MA's), (Start: 86 @39522 has 3 MA's), (88, 39519), (104, 39465), (115, 39432),

Gene: PrincessTrina\_37 Start: 30387, Stop: 30169, Start Num: 79

Candidate Starts for PrincessTrina\_37:

(21, 30537), (28, 30492), (29, 30489), (42, 30450), (61, 30417), (Start: 79 @30387 has 19 MA's), (89, 30366), (97, 30330), (101, 30315), (105, 30300), (111, 30288),

Gene: ProfessorX\_45 Start: 39184, Stop: 38969, Start Num: 66

Candidate Starts for ProfessorX\_45:

(25, 39286), (Start: 66 @39184 has 303 MA's), (Start: 85 @39154 has 25 MA's), (97, 39109),

Gene: Puhltonio\_45 Start: 39205, Stop: 38990, Start Num: 66

Candidate Starts for Puhltonio\_45:

(Start: 66 @39205 has 303 MA's), (Start: 85 @39175 has 25 MA's), (97, 39130), (111, 39097),

Gene: Purky\_30 Start: 26584, Stop: 26351, Start Num: 76

Candidate Starts for Purky\_30:

(33, 26659), (35, 26656), (39, 26650), (Start: 70 @26593 has 3 MA's), (Start: 76 @26584 has 4 MA's), (91, 26560), (102, 26512), (119, 26434), (122, 26419),

Gene: Purky\_36 Start: 28450, Stop: 28653, Start Num: 59

Candidate Starts for Purky\_36:

(Start: 59 @28450 has 1 MA's), (Start: 64 @28462 has 3 MA's), (Start: 75 @28480 has 2 MA's), (115, 28588), (118, 28600),

Gene: QueenBeane\_45 Start: 39195, Stop: 38980, Start Num: 66

Candidate Starts for QueenBeane\_45:

(Start: 66 @39195 has 303 MA's), (Start: 85 @39165 has 25 MA's), (97, 39120), (111, 39087),

Gene: QueenPie\_39 Start: 39295, Stop: 39089, Start Num: 67

Candidate Starts for QueenPie\_39:

(Start: 67 @39295 has 26 MA's), (Start: 85 @39274 has 25 MA's), (Start: 93 @39247 has 4 MA's), (97, 39229), (104, 39211), (114, 39181), (116, 39175),

Gene: Quesadilla\_46 Start: 40987, Stop: 40781, Start Num: 66

Candidate Starts for Quesadilla\_46:

(25, 41086), (Start: 66 @40987 has 303 MA's), (Start: 85 @40966 has 25 MA's), (97, 40921), (99, 40912),

Gene: Quisquiliae\_45 Start: 39223, Stop: 39008, Start Num: 66

Candidate Starts for Quisquilliae\_45:

(25, 39325), (Start: 66 @39223 has 303 MA's), (Start: 85 @39193 has 25 MA's), (97, 39148),

Gene: Qyrzula\_41 Start: 39560, Stop: 39381, Start Num: 86

Candidate Starts for Qyrzula\_41:

(Start: 71 @39587 has 45 MA's), (Start: 86 @39560 has 3 MA's), (88, 39557), (104, 39503), (115, 39470),

Gene: RagingRooster\_43 Start: 39031, Stop: 38795, Start Num: 56

Candidate Starts for RagingRooster\_43:

(Start: 56 @39031 has 59 MA's), (88, 38974), (107, 38908), (111, 38902),

Gene: RavenCo17\_36 Start: 30180, Stop: 29944, Start Num: 73

Candidate Starts for RavenCo17\_36:

(Start: 73 @30180 has 37 MA's), (Start: 93 @30138 has 4 MA's), (98, 30117), (110, 30075), (119, 30027),

Gene: RawrgerThat\_41 Start: 39199, Stop: 38993, Start Num: 67

Candidate Starts for RawrgerThat\_41:

(Start: 67 @39199 has 26 MA's), (Start: 85 @39178 has 25 MA's), (Start: 93 @39151 has 4 MA's), (97, 39133), (104, 39115), (114, 39085), (116, 39079),

Gene: RayTheFireFly\_38 Start: 29870, Stop: 29667, Start Num: 92

Candidate Starts for RayTheFireFly\_38:

(Start: 73 @29903 has 37 MA's), (Start: 92 @29870 has 1 MA's), (98, 29840), (109, 29807), (110, 29798), (119, 29750),

Gene: Reccee\_45 Start: 39831, Stop: 39622, Start Num: 66

Candidate Starts for Reccee\_45:

(24, 39945), (25, 39939), (Start: 66 @39831 has 303 MA's), (Start: 85 @39816 has 25 MA's), (91, 39804), (97, 39771),

Gene: RedFox\_26 Start: 18732, Stop: 18517, Start Num: 85

Candidate Starts for RedFox\_26:

(Start: 85 @18732 has 25 MA's),

Gene: RedMaple\_44 Start: 39202, Stop: 38987, Start Num: 66

Candidate Starts for RedMaple\_44:

(Start: 66 @39202 has 303 MA's), (Start: 85 @39172 has 25 MA's), (97, 39127), (111, 39094),

Gene: RedRaider89\_46 Start: 39422, Stop: 39207, Start Num: 66

Candidate Starts for RedRaider89\_46:

(Start: 66 @39422 has 303 MA's), (Start: 85 @39392 has 25 MA's), (97, 39347), (111, 39314),

Gene: Rem711\_6 Start: 3521, Stop: 3279, Start Num: 73

Candidate Starts for Rem711\_6:

(17, 3722), (38, 3584), (Start: 73 @3521 has 37 MA's), (100, 3443), (110, 3413), (113, 3398), (117, 3380),

Gene: Renkei\_39 Start: 38205, Stop: 37999, Start Num: 67

Candidate Starts for Renkei\_39:

(Start: 67 @38205 has 26 MA's), (Start: 85 @38184 has 25 MA's), (Start: 93 @38157 has 4 MA's), (97, 38139), (104, 38121), (114, 38091), (116, 38085), (121, 38064),

Gene: Reprobate\_44 Start: 39924, Stop: 39715, Start Num: 66

Candidate Starts for Reprobate\_44:

(25, 40032), (Start: 66 @39924 has 303 MA's), (Start: 85 @39909 has 25 MA's), (97, 39864),

Gene: Rhinoforte\_44 Start: 39550, Stop: 39344, Start Num: 71

Candidate Starts for Rhinoforte\_44:

(Start: 71 @39550 has 45 MA's), (Start: 86 @39523 has 3 MA's), (88, 39520), (104, 39466), (115, 39433),

Gene: Rich\_42 Start: 39520, Stop: 39311, Start Num: 66

Candidate Starts for Rich\_42:

(Start: 66 @39520 has 303 MA's), (Start: 85 @39505 has 25 MA's), (91, 39493), (97, 39460), (111, 39427),

Gene: Ricotta\_44 Start: 38921, Stop: 38706, Start Num: 66

Candidate Starts for Ricotta\_44:

(Start: 66 @38921 has 303 MA's), (Start: 85 @38891 has 25 MA's), (97, 38846), (111, 38813),

Gene: Riggan\_45 Start: 39182, Stop: 38967, Start Num: 66

Candidate Starts for Riggan\_45:

(Start: 66 @39182 has 303 MA's), (Start: 85 @39152 has 25 MA's), (97, 39107),

Gene: Rimu\_45 Start: 38931, Stop: 38716, Start Num: 66

Candidate Starts for Rimu\_45:

(Start: 66 @38931 has 303 MA's), (Start: 85 @38901 has 25 MA's), (97, 38856), (111, 38823),

Gene: Rinkes\_44 Start: 40426, Stop: 40223, Start Num: 71

Candidate Starts for Rinkes\_44:

(Start: 71 @40426 has 45 MA's), (97, 40363),

Gene: Rita130\_44 Start: 39651, Stop: 39442, Start Num: 66

Candidate Starts for Rita130\_44:

(24, 39765), (25, 39759), (Start: 66 @39651 has 303 MA's), (Start: 85 @39636 has 25 MA's), (91, 39624), (97, 39591),

Gene: Rita1961\_43 Start: 39014, Stop: 38778, Start Num: 56

Candidate Starts for Rita1961\_43:

(Start: 56 @39014 has 59 MA's), (88, 38957), (107, 38891), (111, 38885),

Gene: Riverton\_44 Start: 39203, Stop: 38988, Start Num: 66

Candidate Starts for Riverton\_44:

(Start: 66 @39203 has 303 MA's), (Start: 85 @39173 has 25 MA's), (97, 39128), (111, 39095),

Gene: Robyn\_44 Start: 38766, Stop: 38551, Start Num: 66

Candidate Starts for Robyn\_44:

(25, 38868), (Start: 66 @38766 has 303 MA's), (Start: 85 @38736 has 25 MA's), (97, 38691),

Gene: Roliet\_45 Start: 39191, Stop: 38976, Start Num: 66

Candidate Starts for Roliet\_45:

(Start: 66 @39191 has 303 MA's), (Start: 85 @39161 has 25 MA's), (97, 39116),

Gene: RomaT\_43 Start: 39804, Stop: 39568, Start Num: 56

Candidate Starts for RomaT\_43:

(Start: 56 @39804 has 59 MA's), (88, 39747), (107, 39681), (111, 39675),

Gene: Roscoe\_46 Start: 39429, Stop: 39214, Start Num: 66

Candidate Starts for Roscoe\_46:

(25, 39531), (Start: 66 @39429 has 303 MA's), (Start: 85 @39399 has 25 MA's), (97, 39354),

Gene: Rosebush\_43 Start: 39530, Stop: 39351, Start Num: 86

Candidate Starts for Rosebush\_43:

(Start: 71 @39557 has 45 MA's), (Start: 86 @39530 has 3 MA's), (88, 39527), (104, 39473), (115, 39440),

Gene: RosiePosie\_37 Start: 30386, Stop: 30168, Start Num: 79

Candidate Starts for RosiePosie\_37:

(21, 30536), (28, 30491), (29, 30488), (42, 30449), (61, 30416), (Start: 79 @30386 has 19 MA's), (89, 30365), (97, 30329), (101, 30314), (105, 30299), (111, 30287),

Gene: Roy17\_45 Start: 38895, Stop: 38680, Start Num: 66

Candidate Starts for Roy17\_45:

(Start: 66 @38895 has 303 MA's), (Start: 85 @38865 has 25 MA's), (97, 38820), (111, 38787),

Gene: Rubeelu\_32 Start: 26751, Stop: 26518, Start Num: 76

Candidate Starts for Rubeelu\_32:

(33, 26826), (35, 26823), (39, 26817), (Start: 70 @26760 has 3 MA's), (Start: 76 @26751 has 4 MA's), (91, 26727), (102, 26679), (119, 26601), (130, 26529),

Gene: SDcharge11\_45 Start: 39169, Stop: 38954, Start Num: 66

Candidate Starts for SDcharge11\_45:

(25, 39271), (Start: 66 @39169 has 303 MA's), (Start: 85 @39139 has 25 MA's), (97, 39094),

Gene: Sabella\_43 Start: 39434, Stop: 39228, Start Num: 71

Candidate Starts for Sabella\_43:

(Start: 71 @39434 has 45 MA's), (Start: 86 @39407 has 3 MA's), (88, 39404), (104, 39350), (115, 39317),

Gene: Saguaro\_45 Start: 40648, Stop: 40445, Start Num: 66

Candidate Starts for Saguaro\_45:

(22, 40756), (Start: 66 @40648 has 303 MA's), (97, 40585), (99, 40576), (114, 40537),

Gene: Sahara\_29 Start: 25333, Stop: 25133, Start Num: 69

Candidate Starts for Sahara\_29:

(Start: 69 @25333 has 13 MA's), (91, 25312), (Start: 93 @25297 has 4 MA's), (96, 25285), (111, 25249),

Gene: SallyH\_45 Start: 39205, Stop: 38990, Start Num: 66

Candidate Starts for SallyH\_45:

(Start: 66 @39205 has 303 MA's), (Start: 85 @39175 has 25 MA's), (97, 39130), (111, 39097),

Gene: Samaymay\_45 Start: 39195, Stop: 38980, Start Num: 66

Candidate Starts for Samaymay\_45:

(Start: 66 @39195 has 303 MA's), (Start: 85 @39165 has 25 MA's), (97, 39120), (111, 39087),

Gene: SassyCat97\_44 Start: 38901, Stop: 38686, Start Num: 66

Candidate Starts for SassyCat97\_44:  
(25, 39003), (Start: 66 @38901 has 303 MA's), (Start: 85 @38871 has 25 MA's), (97, 38826),

Gene: Savage\_30 Start: 25663, Stop: 25463, Start Num: 69  
Candidate Starts for Savage\_30:  
(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: Sbash\_32 Start: 28849, Stop: 28601, Start Num: 76  
Candidate Starts for Sbash\_32:  
(33, 28924), (35, 28921), (39, 28915), (Start: 70 @28858 has 3 MA's), (Start: 76 @28849 has 4 MA's), (91, 28825), (119, 28699), (122, 28684), (132, 28609),

Gene: Scavito\_37 Start: 30384, Stop: 30166, Start Num: 79  
Candidate Starts for Scavito\_37:  
(21, 30534), (28, 30489), (29, 30486), (42, 30447), (61, 30414), (Start: 79 @30384 has 19 MA's), (89, 30363), (97, 30327), (101, 30312), (105, 30297), (111, 30285),

Gene: Schadenfreude\_44 Start: 38752, Stop: 38537, Start Num: 66  
Candidate Starts for Schadenfreude\_44:  
(25, 38854), (Start: 66 @38752 has 303 MA's), (Start: 85 @38722 has 25 MA's), (97, 38677),

Gene: Schueller\_44 Start: 38914, Stop: 38699, Start Num: 66  
Candidate Starts for Schueller\_44:  
(Start: 66 @38914 has 303 MA's), (Start: 85 @38884 has 25 MA's), (97, 38839),

Gene: ScoobySnack\_49 Start: 32220, Stop: 32489, Start Num: 58  
Candidate Starts for ScoobySnack\_49:  
(4, 31728), (5, 31755), (8, 31890), (20, 32076), (Start: 52 @32211 has 9 MA's), (Start: 58 @32220 has 2 MA's), (89, 32280), (94, 32304), (96, 32310),

Gene: Scoot17C\_45 Start: 39194, Stop: 38979, Start Num: 66  
Candidate Starts for Scoot17C\_45:  
(25, 39296), (Start: 66 @39194 has 303 MA's), (Start: 85 @39164 has 25 MA's), (97, 39119),

Gene: Scrick\_45 Start: 38919, Stop: 38704, Start Num: 66  
Candidate Starts for Scrick\_45:  
(25, 39021), (Start: 66 @38919 has 303 MA's), (Start: 85 @38889 has 25 MA's), (97, 38844),

Gene: Selr12\_45 Start: 38922, Stop: 38707, Start Num: 66  
Candidate Starts for Selr12\_45:  
(25, 39024), (Start: 66 @38922 has 303 MA's), (Start: 85 @38892 has 25 MA's), (97, 38847),

Gene: Serendipitous\_43 Start: 39478, Stop: 39269, Start Num: 66  
Candidate Starts for Serendipitous\_43:  
(Start: 66 @39478 has 303 MA's), (Start: 85 @39463 has 25 MA's), (97, 39418),

Gene: Serendipity\_45 Start: 39219, Stop: 39004, Start Num: 66  
Candidate Starts for Serendipity\_45:  
(Start: 66 @39219 has 303 MA's), (Start: 85 @39189 has 25 MA's), (97, 39144), (111, 39111),

Gene: Serpentine\_0045 Start: 39200, Stop: 38985, Start Num: 66  
Candidate Starts for Serpentine\_0045:

(Start: 66 @39200 has 303 MA's), (Start: 85 @39170 has 25 MA's), (97, 39125), (111, 39092),

Gene: ShadowBud\_45 Start: 39220, Stop: 39005, Start Num: 66

Candidate Starts for ShadowBud\_45:

(25, 39322), (Start: 66 @39220 has 303 MA's), (Start: 85 @39190 has 25 MA's), (97, 39145),

Gene: Shambre1\_30 Start: 22778, Stop: 22578, Start Num: 70

Candidate Starts for Shambre1\_30:

(Start: 70 @22778 has 3 MA's), (129, 22595),

Gene: Shatter\_38 Start: 32837, Stop: 32601, Start Num: 48

Candidate Starts for Shatter\_38:

(46, 32840), (Start: 48 @32837 has 5 MA's), (63, 32816), (Start: 67 @32810 has 26 MA's), (83, 32786), (88, 32780), (115, 32690),

Gene: ShawBrad\_38 Start: 29124, Stop: 28888, Start Num: 73

Candidate Starts for ShawBrad\_38:

(Start: 73 @29124 has 37 MA's), (Start: 93 @29082 has 4 MA's), (98, 29061), (110, 29019), (119, 28971),

Gene: Sheila\_45 Start: 39237, Stop: 39022, Start Num: 66

Candidate Starts for Sheila\_45:

(Start: 66 @39237 has 303 MA's), (Start: 85 @39207 has 25 MA's), (97, 39162), (111, 39129),

Gene: Shenandoah\_43 Start: 39003, Stop: 38767, Start Num: 56

Candidate Starts for Shenandoah\_43:

(Start: 56 @39003 has 59 MA's), (88, 38946), (107, 38880), (111, 38874),

Gene: Shenyu\_43 Start: 39713, Stop: 39504, Start Num: 66

Candidate Starts for Shenyu\_43:

(25, 39821), (Start: 66 @39713 has 303 MA's), (Start: 85 @39698 has 25 MA's), (91, 39686),

Gene: ShiVal\_45 Start: 39193, Stop: 38978, Start Num: 66

Candidate Starts for ShiVal\_45:

(25, 39295), (Start: 66 @39193 has 303 MA's), (Start: 85 @39163 has 25 MA's), (97, 39118),

Gene: ShroomBoi\_22 Start: 24354, Stop: 24175, Start Num: 71

Candidate Starts for ShroomBoi\_22:

(Start: 59 @24378 has 1 MA's), (Start: 71 @24354 has 45 MA's), (Start: 75 @24348 has 2 MA's), (91, 24336), (Start: 93 @24321 has 4 MA's), (103, 24288), (125, 24192),

Gene: Sigman\_45 Start: 39185, Stop: 38970, Start Num: 66

Candidate Starts for Sigman\_45:

(Start: 66 @39185 has 303 MA's), (Start: 85 @39155 has 25 MA's), (97, 39110), (111, 39077),

Gene: SilverBell\_45 Start: 39215, Stop: 39000, Start Num: 66

Candidate Starts for SilverBell\_45:

(Start: 66 @39215 has 303 MA's), (Start: 85 @39185 has 25 MA's), (97, 39140),

Gene: Simielle\_44 Start: 38888, Stop: 38673, Start Num: 66

Candidate Starts for Simielle\_44:

(Start: 66 @38888 has 303 MA's), (Start: 85 @38858 has 25 MA's), (97, 38813), (111, 38780),

Gene: SirBeauregard\_45 Start: 38892, Stop: 38677, Start Num: 66  
Candidate Starts for SirBeauregard\_45:  
(25, 38994), (Start: 66 @38892 has 303 MA's), (Start: 85 @38862 has 25 MA's), (97, 38817),

Gene: SirJeffery\_44 Start: 39650, Stop: 39441, Start Num: 66  
Candidate Starts for SirJeffery\_44:  
(24, 39764), (25, 39758), (Start: 66 @39650 has 303 MA's), (Start: 85 @39635 has 25 MA's), (91, 39623), (97, 39590),

Gene: Sisko\_38 Start: 33610, Stop: 33383, Start Num: 53  
Candidate Starts for Sisko\_38:  
(Start: 53 @33610 has 5 MA's), (108, 33493), (125, 33424),

Gene: Skippy\_45 Start: 39183, Stop: 38968, Start Num: 66  
Candidate Starts for Skippy\_45:  
(25, 39285), (Start: 66 @39183 has 303 MA's), (Start: 85 @39153 has 25 MA's), (97, 39108),

Gene: Slatt\_45 Start: 39209, Stop: 38994, Start Num: 66  
Candidate Starts for Slatt\_45:  
(Start: 66 @39209 has 303 MA's), (Start: 85 @39179 has 25 MA's), (97, 39134),

Gene: Sleepyhead\_33 Start: 26741, Stop: 26493, Start Num: 73  
Candidate Starts for Sleepyhead\_33:  
(41, 26798), (Start: 73 @26741 has 37 MA's), (84, 26723), (106, 26651), (110, 26636),

Gene: SlippinJimmy\_43 Start: 39796, Stop: 39560, Start Num: 56  
Candidate Starts for SlippinJimmy\_43:  
(Start: 56 @39796 has 59 MA's), (88, 39739), (107, 39673), (111, 39667),

Gene: Soile\_45 Start: 38912, Stop: 38697, Start Num: 66  
Candidate Starts for Soile\_45:  
(Start: 66 @38912 has 303 MA's), (Start: 85 @38882 has 25 MA's), (97, 38837), (111, 38804),

Gene: Solosis\_44 Start: 38910, Stop: 38695, Start Num: 66  
Candidate Starts for Solosis\_44:  
(Start: 66 @38910 has 303 MA's), (Start: 85 @38880 has 25 MA's), (97, 38835), (111, 38802),

Gene: Sonali\_93 Start: 57959, Stop: 57690, Start Num: 51  
Candidate Starts for Sonali\_93:  
(Start: 51 @57959 has 2 MA's), (Start: 56 @57953 has 59 MA's), (60, 57947), (65, 57935), (Start: 75 @57920 has 2 MA's), (Start: 77 @57917 has 1 MA's), (Start: 92 @57884 has 1 MA's), (94, 57869),

Gene: Sophia\_44 Start: 38910, Stop: 38695, Start Num: 66  
Candidate Starts for Sophia\_44:  
(Start: 66 @38910 has 303 MA's), (Start: 85 @38880 has 25 MA's), (97, 38835),

Gene: Soto\_45 Start: 39203, Stop: 38988, Start Num: 66  
Candidate Starts for Soto\_45:  
(Start: 66 @39203 has 303 MA's), (Start: 85 @39173 has 25 MA's), (97, 39128),

Gene: Sour\_43 Start: 37566, Stop: 37306, Start Num: 56  
Candidate Starts for Sour\_43:  
(Start: 56 @37566 has 59 MA's), (88, 37515),

Gene: Spartan300\_45 Start: 39189, Stop: 38974, Start Num: 66  
Candidate Starts for Spartan300\_45:  
(25, 39291), (Start: 66 @39189 has 303 MA's), (Start: 85 @39159 has 25 MA's), (97, 39114),

Gene: Spooky\_39 Start: 29741, Stop: 29508, Start Num: 70  
Candidate Starts for Spooky\_39:  
(38, 29801), (54, 29771), (Start: 70 @29741 has 3 MA's), (72, 29738), (81, 29723), (126, 29549), (128, 29543),

Gene: Sproutie\_30 Start: 25663, Stop: 25463, Start Num: 69  
Candidate Starts for Sproutie\_30:  
(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: Squid\_45 Start: 38901, Stop: 38686, Start Num: 66  
Candidate Starts for Squid\_45:  
(25, 39003), (Start: 66 @38901 has 303 MA's), (Start: 85 @38871 has 25 MA's), (97, 38826),

Gene: Squiddly\_40 Start: 31125, Stop: 30892, Start Num: 70  
Candidate Starts for Squiddly\_40:  
(38, 31185), (54, 31155), (Start: 70 @31125 has 3 MA's), (72, 31122), (81, 31107), (126, 30933), (128, 30927),

Gene: Squiggle\_45 Start: 38913, Stop: 38698, Start Num: 66  
Candidate Starts for Squiggle\_45:  
(25, 39015), (Start: 66 @38913 has 303 MA's), (Start: 85 @38883 has 25 MA's), (97, 38838),

Gene: Stinger\_39 Start: 37776, Stop: 37570, Start Num: 67  
Candidate Starts for Stinger\_39:  
(Start: 67 @37776 has 26 MA's), (Start: 85 @37755 has 25 MA's), (88, 37749), (Start: 93 @37728 has 4 MA's), (97, 37710), (104, 37692), (114, 37662), (115, 37659), (116, 37656),

Gene: StinkyVeggy\_45 Start: 39790, Stop: 39581, Start Num: 66  
Candidate Starts for StinkyVeggy\_45:  
(25, 39898), (Start: 66 @39790 has 303 MA's), (Start: 85 @39775 has 25 MA's), (91, 39763),

Gene: Struggle\_44 Start: 38751, Stop: 38536, Start Num: 66  
Candidate Starts for Struggle\_44:  
(25, 38853), (Start: 66 @38751 has 303 MA's), (Start: 85 @38721 has 25 MA's), (97, 38676),

Gene: Stuck\_40 Start: 31182, Stop: 30949, Start Num: 76  
Candidate Starts for Stuck\_40:  
(33, 31257), (35, 31254), (39, 31248), (Start: 70 @31191 has 3 MA's), (Start: 76 @31182 has 4 MA's), (91, 31158), (102, 31110), (119, 31032),

Gene: Suffolk\_45 Start: 39200, Stop: 38985, Start Num: 66  
Candidate Starts for Suffolk\_45:  
(Start: 66 @39200 has 303 MA's), (Start: 85 @39170 has 25 MA's), (97, 39125),

Gene: Suigeneris\_44 Start: 39653, Stop: 39444, Start Num: 66  
Candidate Starts for Suigeneris\_44:

(24, 39767), (25, 39761), (Start: 66 @39653 has 303 MA's), (Start: 85 @39638 has 25 MA's), (91, 39626), (97, 39593),

Gene: Surely\_45 Start: 39203, Stop: 38988, Start Num: 66

Candidate Starts for Surely\_45:

(Start: 66 @39203 has 303 MA's), (Start: 85 @39173 has 25 MA's), (97, 39128),

Gene: Susceptit\_35 Start: 29355, Stop: 29119, Start Num: 73

Candidate Starts for Susceptit\_35:

(Start: 73 @29355 has 37 MA's), (Start: 93 @29313 has 4 MA's), (98, 29292), (110, 29250), (119, 29202), (130, 29130),

Gene: SwainyDoc\_43 Start: 39025, Stop: 38789, Start Num: 56

Candidate Starts for SwainyDoc\_43:

(Start: 56 @39025 has 59 MA's), (88, 38968), (107, 38902), (111, 38896),

Gene: Swiphy\_45 Start: 39198, Stop: 38983, Start Num: 66

Candidate Starts for Swiphy\_45:

(Start: 66 @39198 has 303 MA's), (Start: 85 @39168 has 25 MA's), (97, 39123),

Gene: Swish\_45 Start: 39186, Stop: 38971, Start Num: 66

Candidate Starts for Swish\_45:

(Start: 66 @39186 has 303 MA's), (Start: 85 @39156 has 25 MA's), (97, 39111), (111, 39078),

Gene: SynergyX\_43 Start: 39031, Stop: 38795, Start Num: 56

Candidate Starts for SynergyX\_43:

(Start: 56 @39031 has 59 MA's), (88, 38974), (107, 38908), (111, 38902),

Gene: TA17A\_45 Start: 39424, Stop: 39218, Start Num: 71

Candidate Starts for TA17A\_45:

(Start: 71 @39424 has 45 MA's), (Start: 86 @39397 has 3 MA's), (88, 39394), (104, 39340), (115, 39307),

Gene: TallGrassMM\_45 Start: 38825, Stop: 38610, Start Num: 66

Candidate Starts for TallGrassMM\_45:

(Start: 66 @38825 has 303 MA's), (Start: 85 @38795 has 25 MA's), (97, 38750), (111, 38717),

Gene: TaylorSipht\_26 Start: 18969, Stop: 18775, Start Num: 85

Candidate Starts for TaylorSipht\_26:

(Start: 85 @18969 has 25 MA's),

Gene: Tayonia\_35 Start: 29354, Stop: 29118, Start Num: 73

Candidate Starts for Tayonia\_35:

(Start: 73 @29354 has 37 MA's), (Start: 93 @29312 has 4 MA's), (98, 29291), (110, 29249), (119, 29201), (130, 29129),

Gene: Telesworld\_44 Start: 38898, Stop: 38683, Start Num: 66

Candidate Starts for Telesworld\_44:

(Start: 66 @38898 has 303 MA's), (Start: 85 @38868 has 25 MA's), (97, 38823), (111, 38790),

Gene: ThetaBob\_24 Start: 24665, Stop: 24492, Start Num: 75

Candidate Starts for ThetaBob\_24:

(Start: 59 @24695 has 1 MA's), (Start: 71 @24671 has 45 MA's), (Start: 75 @24665 has 2 MA's),  
(Start: 93 @24638 has 4 MA's), (103, 24605), (125, 24509),

Gene: Thonko\_43 Start: 36961, Stop: 36752, Start Num: 64

Candidate Starts for Thonko\_43:

(19, 37108), (25, 37054), (Start: 64 @36961 has 3 MA's), (91, 36931), (111, 36865),

Gene: Thora\_45 Start: 39202, Stop: 38987, Start Num: 66

Candidate Starts for Thora\_45:

(Start: 66 @39202 has 303 MA's), (Start: 85 @39172 has 25 MA's), (97, 39127),

Gene: ThreeOh3D2\_45 Start: 39200, Stop: 38985, Start Num: 66

Candidate Starts for ThreeOh3D2\_45:

(25, 39302), (Start: 66 @39200 has 303 MA's), (Start: 85 @39170 has 25 MA's), (97, 39125),

Gene: Thunderbird\_44 Start: 38906, Stop: 38691, Start Num: 66

Candidate Starts for Thunderbird\_44:

(25, 39008), (Start: 66 @38906 has 303 MA's), (Start: 85 @38876 has 25 MA's), (97, 38831),

Gene: TimTam\_34 Start: 29521, Stop: 29285, Start Num: 73

Candidate Starts for TimTam\_34:

(Start: 73 @29521 has 37 MA's), (Start: 93 @29479 has 4 MA's), (110, 29416), (119, 29368), (121, 29356),

Gene: Timmi\_44 Start: 38911, Stop: 38696, Start Num: 66

Candidate Starts for Timmi\_44:

(Start: 66 @38911 has 303 MA's), (Start: 85 @38881 has 25 MA's), (97, 38836), (111, 38803),

Gene: Tinciduntolum\_45 Start: 39562, Stop: 39356, Start Num: 71

Candidate Starts for Tinciduntolum\_45:

(Start: 71 @39562 has 45 MA's), (Start: 86 @39535 has 3 MA's), (88, 39532), (104, 39478), (115, 39445),

Gene: TinyTerror\_43 Start: 39016, Stop: 38780, Start Num: 56

Candidate Starts for TinyTerror\_43:

(Start: 56 @39016 has 59 MA's), (88, 38959), (107, 38893), (111, 38887),

Gene: Toad24\_27 Start: 20160, Stop: 19957, Start Num: 85

Candidate Starts for Toad24\_27:

(Start: 85 @20160 has 25 MA's),

Gene: TomBombadil\_45 Start: 39196, Stop: 38981, Start Num: 66

Candidate Starts for TomBombadil\_45:

(25, 39298), (Start: 66 @39196 has 303 MA's), (Start: 85 @39166 has 25 MA's), (97, 39121),

Gene: Tomlarah\_45 Start: 39187, Stop: 38972, Start Num: 66

Candidate Starts for Tomlarah\_45:

(25, 39289), (Start: 66 @39187 has 303 MA's), (Start: 85 @39157 has 25 MA's), (97, 39112),

Gene: Toni\_44 Start: 38903, Stop: 38688, Start Num: 66

Candidate Starts for Toni\_44:

(Start: 66 @38903 has 303 MA's), (Start: 85 @38873 has 25 MA's), (97, 38828), (111, 38795),

Gene: TooFast2Furius\_47 Start: 39432, Stop: 39217, Start Num: 66  
Candidate Starts for TooFast2Furius\_47:  
(25, 39534), (Start: 66 @39432 has 303 MA's), (Start: 85 @39402 has 25 MA's), (97, 39357),

Gene: Tooj\_45 Start: 39260, Stop: 39045, Start Num: 66  
Candidate Starts for Tooj\_45:  
(Start: 66 @39260 has 303 MA's), (Start: 85 @39230 has 25 MA's), (97, 39185),

Gene: Tophat\_37 Start: 30385, Stop: 30167, Start Num: 79  
Candidate Starts for Tophat\_37:  
(21, 30535), (28, 30490), (29, 30487), (42, 30448), (61, 30415), (Start: 79 @30385 has 19 MA's), (89, 30364), (97, 30328), (101, 30313), (105, 30298), (111, 30286),

Gene: TraderJ\_40 Start: 34851, Stop: 34585, Start Num: 56  
Candidate Starts for TraderJ\_40:  
(31, 34896), (34, 34887), (Start: 56 @34851 has 59 MA's), (Start: 85 @34803 has 25 MA's), (Start: 86 @34800 has 3 MA's), (91, 34791), (107, 34731), (116, 34704),

Gene: Tres\_44 Start: 39437, Stop: 39231, Start Num: 71  
Candidate Starts for Tres\_44:  
(Start: 71 @39437 has 45 MA's), (Start: 86 @39410 has 3 MA's), (88, 39407), (104, 39353), (115, 39320),

Gene: Triad\_45 Start: 38064, Stop: 37849, Start Num: 66  
Candidate Starts for Triad\_45:  
(Start: 66 @38064 has 303 MA's), (Start: 85 @38034 has 25 MA's), (97, 37989), (111, 37956),

Gene: True\_44 Start: 38900, Stop: 38685, Start Num: 66  
Candidate Starts for True\_44:  
(25, 39002), (Start: 66 @38900 has 303 MA's), (Start: 85 @38870 has 25 MA's), (97, 38825),

Gene: Trumpet\_35 Start: 29355, Stop: 29119, Start Num: 73  
Candidate Starts for Trumpet\_35:  
(Start: 73 @29355 has 37 MA's), (Start: 93 @29313 has 4 MA's), (98, 29292), (110, 29250), (119, 29202), (130, 29130),

Gene: Trypo\_45 Start: 39196, Stop: 38981, Start Num: 66  
Candidate Starts for Trypo\_45:  
(25, 39298), (Start: 66 @39196 has 303 MA's), (Start: 85 @39166 has 25 MA's), (97, 39121),

Gene: TuertoX\_30 Start: 25663, Stop: 25463, Start Num: 69  
Candidate Starts for TuertoX\_30:  
(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: Tydolla\_43 Start: 39765, Stop: 39529, Start Num: 56  
Candidate Starts for Tydolla\_43:  
(Start: 56 @39765 has 59 MA's), (88, 39708), (107, 39642), (111, 39636),

Gene: TyrionL\_44 Start: 38759, Stop: 38544, Start Num: 66  
Candidate Starts for TyrionL\_44:  
(Start: 66 @38759 has 303 MA's), (Start: 85 @38729 has 25 MA's), (97, 38684), (111, 38651),

Gene: UAch1\_45 Start: 39209, Stop: 38994, Start Num: 66  
Candidate Starts for UAch1\_45:  
(Start: 66 @39209 has 303 MA's), (Start: 85 @39179 has 25 MA's), (97, 39134),

Gene: UncleHowie\_45 Start: 38899, Stop: 38684, Start Num: 66  
Candidate Starts for UncleHowie\_45:  
(25, 39001), (Start: 66 @38899 has 303 MA's), (Start: 85 @38869 has 25 MA's), (97, 38824), (111, 38791),

Gene: Usavi\_45 Start: 39200, Stop: 38985, Start Num: 66  
Candidate Starts for Usavi\_45:  
(Start: 66 @39200 has 303 MA's), (Start: 85 @39170 has 25 MA's), (97, 39125),

Gene: Vaishali24\_44 Start: 38861, Stop: 38646, Start Num: 66  
Candidate Starts for Vaishali24\_44:  
(Start: 66 @38861 has 303 MA's), (Start: 85 @38831 has 25 MA's), (97, 38786), (111, 38753),

Gene: Valjean\_45 Start: 39192, Stop: 38977, Start Num: 66  
Candidate Starts for Valjean\_45:  
(25, 39294), (Start: 66 @39192 has 303 MA's), (Start: 85 @39162 has 25 MA's), (97, 39117),

Gene: Vasanti\_31 Start: 26204, Stop: 25965, Start Num: 69  
Candidate Starts for Vasanti\_31:  
(Start: 69 @26204 has 13 MA's), (91, 26183), (Start: 93 @26168 has 4 MA's), (96, 26156), (111, 26120), (134, 25973),

Gene: Vaticameos\_41 Start: 36890, Stop: 36675, Start Num: 66  
Candidate Starts for Vaticameos\_41:  
(Start: 66 @36890 has 303 MA's), (Start: 85 @36860 has 25 MA's), (97, 36815), (111, 36782),

Gene: Veritas\_44 Start: 38762, Stop: 38547, Start Num: 66  
Candidate Starts for Veritas\_44:  
(Start: 66 @38762 has 303 MA's), (Start: 85 @38732 has 25 MA's), (97, 38687),

Gene: Vic9\_00043 Start: 39943, Stop: 39737, Start Num: 71  
Candidate Starts for Vic9\_00043:  
(Start: 71 @39943 has 45 MA's), (Start: 86 @39916 has 3 MA's), (104, 39859), (115, 39826),

Gene: Vincenzo\_41 Start: 39951, Stop: 39745, Start Num: 67  
Candidate Starts for Vincenzo\_41:  
(Start: 67 @39951 has 26 MA's), (Start: 85 @39930 has 25 MA's), (88, 39924), (Start: 93 @39903 has 4 MA's), (97, 39885), (99, 39876), (104, 39867), (114, 39837), (115, 39834), (116, 39831),

Gene: VioletZ\_41 Start: 39270, Stop: 39064, Start Num: 67  
Candidate Starts for VioletZ\_41:  
(Start: 67 @39270 has 26 MA's), (Start: 85 @39249 has 25 MA's), (Start: 93 @39222 has 4 MA's), (97, 39204), (104, 39186), (114, 39156), (116, 39150),

Gene: Violeta\_54 Start: 32507, Stop: 32782, Start Num: 52  
Candidate Starts for Violeta\_54:  
(20, 32372), (Start: 52 @32507 has 9 MA's), (Start: 58 @32516 has 2 MA's), (89, 32573), (94, 32597), (96, 32603), (120, 32696),

Gene: Virapocalypse\_45 Start: 39187, Stop: 38972, Start Num: 66  
Candidate Starts for Virapocalypse\_45:  
(Start: 66 @39187 has 303 MA's), (Start: 85 @39157 has 25 MA's), (97, 39112),

Gene: Virgeve\_44 Start: 38967, Stop: 38752, Start Num: 66  
Candidate Starts for Virgeve\_44:  
(25, 39069), (Start: 66 @38967 has 303 MA's), (Start: 85 @38937 has 25 MA's), (97, 38892),

Gene: Vista\_45 Start: 39200, Stop: 38985, Start Num: 66  
Candidate Starts for Vista\_45:  
(Start: 66 @39200 has 303 MA's), (Start: 85 @39170 has 25 MA's), (97, 39125),

Gene: Vivaldi\_45 Start: 39229, Stop: 39014, Start Num: 66  
Candidate Starts for Vivaldi\_45:  
(25, 39331), (Start: 66 @39229 has 303 MA's), (Start: 85 @39199 has 25 MA's), (97, 39154),

Gene: Vortex\_45 Start: 38906, Stop: 38691, Start Num: 66  
Candidate Starts for Vortex\_45:  
(Start: 66 @38906 has 303 MA's), (Start: 85 @38876 has 25 MA's), (97, 38831), (111, 38798),

Gene: Vulpecula\_25 Start: 19383, Stop: 19186, Start Num: 74  
Candidate Starts for Vulpecula\_25:  
(Start: 74 @19383 has 5 MA's),

Gene: Waleliano\_40 Start: 39197, Stop: 38991, Start Num: 67  
Candidate Starts for Waleliano\_40:  
(Start: 67 @39197 has 26 MA's), (Start: 85 @39176 has 25 MA's), (Start: 93 @39149 has 4 MA's), (97, 39131), (104, 39113), (114, 39083), (116, 39077),

Gene: Wallhey\_44 Start: 38763, Stop: 38548, Start Num: 66  
Candidate Starts for Wallhey\_44:  
(Start: 66 @38763 has 303 MA's), (Start: 85 @38733 has 25 MA's), (97, 38688), (111, 38655),

Gene: Warren\_52 Start: 32462, Stop: 32737, Start Num: 52  
Candidate Starts for Warren\_52:  
(Start: 52 @32462 has 9 MA's), (Start: 58 @32471 has 2 MA's), (89, 32528), (94, 32552), (96, 32558), (120, 32651),

Gene: Waterdiva\_45 Start: 39192, Stop: 38977, Start Num: 66  
Candidate Starts for Waterdiva\_45:  
(Start: 66 @39192 has 303 MA's), (Start: 85 @39162 has 25 MA's), (97, 39117),

Gene: Weher20\_45 Start: 39191, Stop: 38976, Start Num: 66  
Candidate Starts for Weher20\_45:  
(Start: 66 @39191 has 303 MA's), (Start: 85 @39161 has 25 MA's), (97, 39116),

Gene: West99\_44 Start: 39557, Stop: 39351, Start Num: 71  
Candidate Starts for West99\_44:  
(Start: 71 @39557 has 45 MA's), (Start: 86 @39530 has 3 MA's), (88, 39527), (104, 39473), (115, 39440),

Gene: Whack\_33 Start: 28160, Stop: 27924, Start Num: 73  
Candidate Starts for Whack\_33:

(Start: 58 @28187 has 2 MA's), (Start: 73 @28160 has 37 MA's), (113, 28040),

Gene: Whiteclaw\_30 Start: 25663, Stop: 25463, Start Num: 69

Candidate Starts for Whiteclaw\_30:

(Start: 69 @25663 has 13 MA's), (91, 25642), (Start: 93 @25627 has 4 MA's), (96, 25615), (111, 25579),

Gene: Whitney\_42 Start: 32542, Stop: 32306, Start Num: 73

Candidate Starts for Whitney\_42:

(Start: 73 @32542 has 37 MA's), (Start: 93 @32500 has 4 MA's), (98, 32479), (110, 32437), (119, 32389),

Gene: WileyE\_25 Start: 18878, Stop: 18663, Start Num: 74

Candidate Starts for WileyE\_25:

(Start: 74 @18878 has 5 MA's),

Gene: Winchester007\_68 Start: 38187, Stop: 38462, Start Num: 52

Candidate Starts for Winchester007\_68:

(6, 37791), (8, 37866), (20, 38052), (Start: 52 @38187 has 9 MA's), (Start: 58 @38196 has 2 MA's), (89, 38253), (94, 38277), (96, 38283), (120, 38376),

Gene: Windsor\_44 Start: 38896, Stop: 38681, Start Num: 66

Candidate Starts for Windsor\_44:

(25, 38998), (Start: 66 @38896 has 303 MA's), (Start: 85 @38866 has 25 MA's), (97, 38821),

Gene: Wooper\_40 Start: 34857, Stop: 34591, Start Num: 56

Candidate Starts for Wooper\_40:

(31, 34902), (34, 34893), (Start: 56 @34857 has 59 MA's), (Start: 85 @34809 has 25 MA's), (Start: 86 @34806 has 3 MA's), (91, 34797), (107, 34737), (116, 34710),

Gene: Xavier\_44 Start: 38913, Stop: 38698, Start Num: 66

Candidate Starts for Xavier\_44:

(Start: 66 @38913 has 303 MA's), (Start: 85 @38883 has 25 MA's), (97, 38838), (111, 38805),

Gene: Xincheng\_39 Start: 38653, Stop: 38447, Start Num: 67

Candidate Starts for Xincheng\_39:

(Start: 67 @38653 has 26 MA's), (Start: 85 @38632 has 25 MA's), (Start: 93 @38605 has 4 MA's), (97, 38587), (104, 38569), (114, 38539), (116, 38533),

Gene: Yago84\_38 Start: 33684, Stop: 33457, Start Num: 53

Candidate Starts for Yago84\_38:

(Start: 53 @33684 has 5 MA's), (108, 33567), (125, 33498),

Gene: Yahalom\_43 Start: 39041, Stop: 38805, Start Num: 56

Candidate Starts for Yahalom\_43:

(Start: 56 @39041 has 59 MA's), (88, 38984), (107, 38918), (111, 38912),

Gene: Yeshua\_40 Start: 34834, Stop: 34568, Start Num: 56

Candidate Starts for Yeshua\_40:

(31, 34879), (34, 34870), (Start: 56 @34834 has 59 MA's), (Start: 85 @34786 has 25 MA's), (Start: 86 @34783 has 3 MA's), (91, 34774), (107, 34714), (116, 34687),

Gene: Yinz\_43 Start: 39067, Stop: 38831, Start Num: 56

Candidate Starts for Yinz\_43:

(Start: 56 @39067 has 59 MA's), (88, 39010), (107, 38944), (111, 38938),

Gene: Yoshand\_45 Start: 39199, Stop: 38984, Start Num: 66

Candidate Starts for Yoshand\_45:

(Start: 66 @39199 has 303 MA's), (Start: 85 @39169 has 25 MA's), (97, 39124), (111, 39091),

Gene: Yoshi\_28 Start: 24080, Stop: 23901, Start Num: 71

Candidate Starts for Yoshi\_28:

(Start: 59 @24104 has 1 MA's), (Start: 71 @24080 has 45 MA's), (Start: 75 @24074 has 2 MA's),  
(Start: 93 @24047 has 4 MA's), (103, 24014), (125, 23918),

Gene: YouGoGlencoco\_45 Start: 39194, Stop: 38979, Start Num: 66

Candidate Starts for YouGoGlencoco\_45:

(Start: 66 @39194 has 303 MA's), (Start: 85 @39164 has 25 MA's), (97, 39119),

Gene: Zaider\_46 Start: 39424, Stop: 39209, Start Num: 66

Candidate Starts for Zaider\_46:

(Start: 66 @39424 has 303 MA's), (Start: 85 @39394 has 25 MA's), (97, 39349),

Gene: Zameen\_35 Start: 29354, Stop: 29118, Start Num: 73

Candidate Starts for Zameen\_35:

(Start: 73 @29354 has 37 MA's), (Start: 93 @29312 has 4 MA's), (98, 29291), (110, 29249), (119,  
29201), (130, 29129),

Gene: Zelda\_45 Start: 39241, Stop: 39026, Start Num: 66

Candidate Starts for Zelda\_45:

(Start: 66 @39241 has 303 MA's), (Start: 85 @39211 has 25 MA's), (97, 39166),

Gene: Zemanar\_41 Start: 39200, Stop: 38994, Start Num: 67

Candidate Starts for Zemanar\_41:

(Start: 67 @39200 has 26 MA's), (Start: 85 @39179 has 25 MA's), (Start: 93 @39152 has 4 MA's), (97,  
39134), (104, 39116), (114, 39086), (116, 39080),

Gene: Zenteno07\_48 Start: 38553, Stop: 38338, Start Num: 68

Candidate Starts for Zenteno07\_48:

(Start: 68 @38553 has 3 MA's), (Start: 85 @38529 has 25 MA's), (99, 38475), (126, 38379),

Gene: Zonia\_45 Start: 39213, Stop: 38998, Start Num: 66

Candidate Starts for Zonia\_45:

(Start: 66 @39213 has 303 MA's), (Start: 85 @39183 has 25 MA's), (97, 39138), (111, 39105),

Gene: phiAsp2\_39 Start: 33131, Stop: 33403, Start Num: 62

Candidate Starts for phiAsp2\_39:

(42, 33095), (Start: 62 @33131 has 1 MA's), (Start: 73 @33155 has 37 MA's), (Start: 92 @33191 has 1  
MA's), (108, 33251), (123, 33317), (133, 33392),