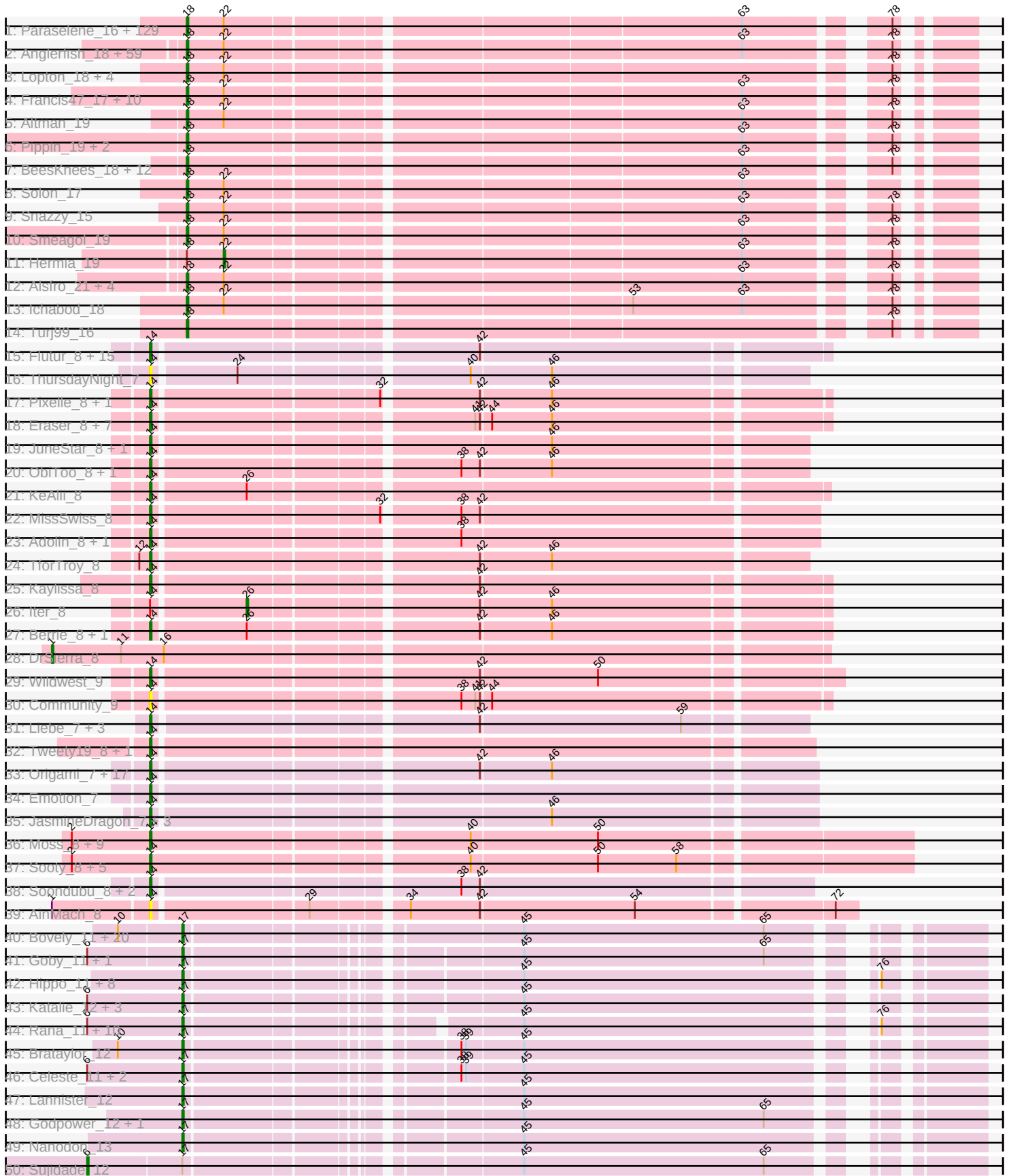
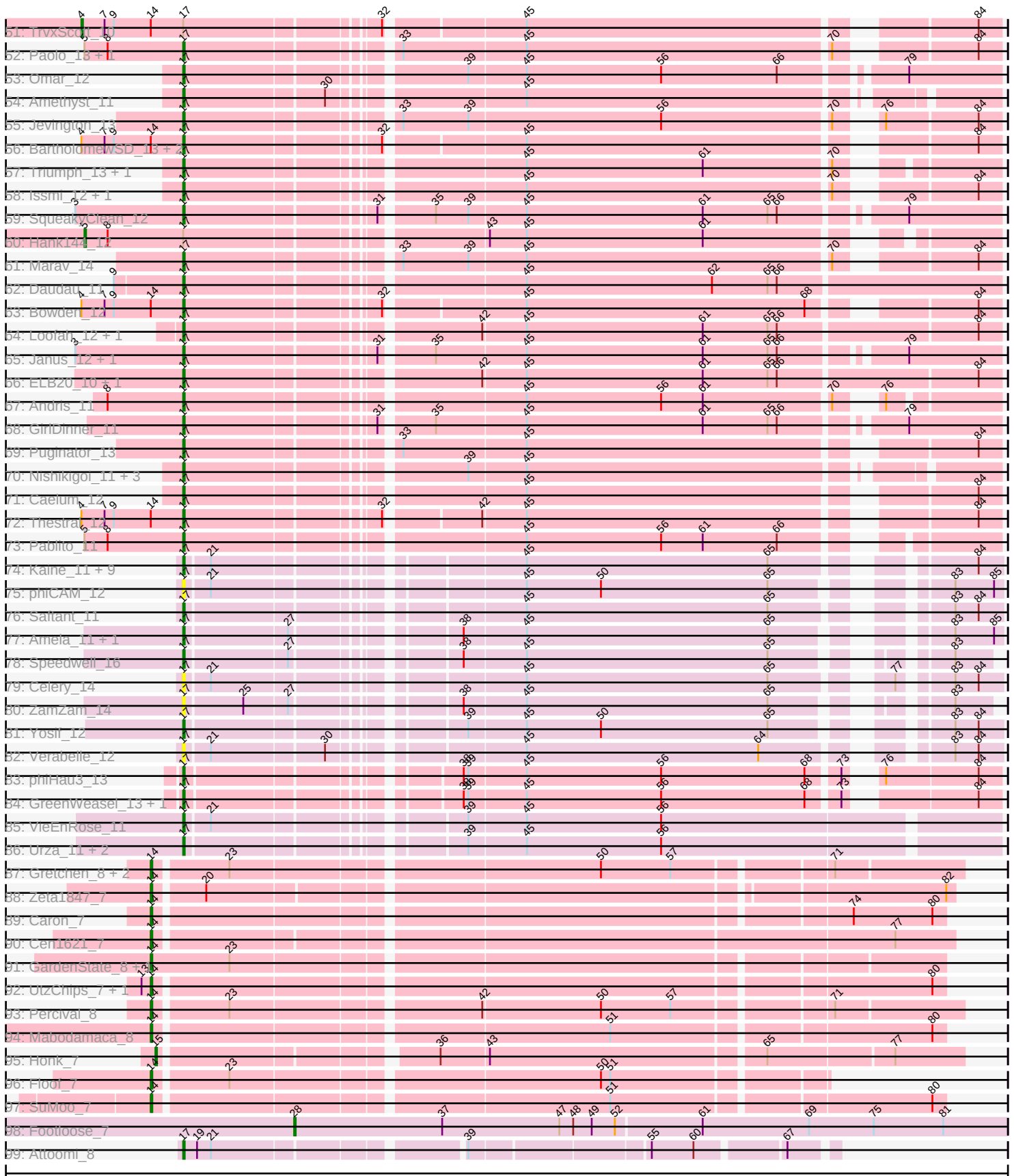


# Pham 279981



# Pham 279981



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 279981 Report

This analysis was run 02/07/26 on database version 634.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 279981 has 459 members, 56 are drafts.

Phages represented in each track:

- Track 1 : Paraselene\_16, Nerujay\_18, Molly\_18, Petp2012\_19, Pepe\_18, Bigfoot\_16, Euphoria\_17, Bruns\_16, Michley\_17, Sorpresa\_17, Pita2\_19, Mryolo\_16, ILeeKay\_19, PSullivan\_19, StewieG\_16, Jasper\_18, MetalQZJ\_17, Rohr\_18, MaryBeth\_17, Blue\_17, PattyP\_19, BigMau\_19, Seanderson\_18, BigPaolini\_18, Hami1\_19, Graduation\_19, Sumter\_16, Payneful\_17, Magnito\_16, Burton\_18, MPlant7149\_16, Marge\_18, Barriga\_17, Makemake\_17, Niza\_19, Dynamix\_18, Beatrix\_16, Eyeball\_17, Watermelon\_19, Fascinus\_16, Fushigi\_18, SkiPole\_19, Magnar\_17, Gandalf20\_18, Gachnar\_17, Marco3\_17, Crispicous1\_16, Aeneas\_19, Bethlehem\_17, Museum\_19, Lesedi\_16, PhrostyMug\_17, ProMouse\_16, BPBiebs31\_18, MilleFeuille\_14, Levi\_17, Sandaddy\_16, DD5\_18, Mule\_17, Moose\_16, Teodoridan\_15, Pelly\_18, Zeuska\_18, Ringer\_17, HarryOW\_18, GageAP\_19, ChristmasHams\_17, Marchy\_16, Lockley\_17, Abrogate\_180, Tasp14\_18, Maroc7\_16, Fajezeel\_19, EnzoK\_18, Sagefire\_18, Paphu\_16, Swole\_19, KBG\_18, Tote\_19, Perseus\_18, GrecoEtereo\_18, JackSparrow\_18, Dreamboat\_18, Sanya\_16, Rutherford\_19, Rhynn\_17, Ashballer\_16, McGuire\_18, Pinto\_19, IgnatiusPatJac\_16, Arlo\_16, Bob3\_16, Blessor\_17, PhineBark\_16, KSSJEB\_17, Pari\_18, Ajay\_17, KyMonks1A\_19, Kanely\_18, Applejack\_17, TwoPeat\_18, Rubeus\_18, Espresso\_17, Killigrew\_15, Atkinbua\_18, Lamina13\_17, Sunshine924\_16, Dulcie\_16, QTRLifeCrisis\_17, Slagathor\_18, Jerm2\_18, Greg\_19, SwissCheese\_17, Homines\_17, MrGordo\_17, Trouble\_17, AFIS\_17, Forsytheast\_16, Seabiscuit\_19, JuliaChild\_19, Jorgensen\_17, BarrowTuph\_16, CactusRose\_16, BluSpix\_17, Chanagan\_16, Dexes\_18, Philipppers\_16, Ohno789\_17, PinkPlastic\_16, SpikeBT\_19
- Track 2 : Anglerfish\_18, Parliament\_16, CartmannCramer\_17, Bircsak\_17, PowerRanger\_17, Kenmech\_20, Squee\_18, Gompeii16\_17, Thor\_17, Briton15\_19, Agaliana\_17, Bigchung\_17, Peterson\_20, StrongArm\_16, Switzer\_18, Dussy\_18, Alvin\_18, Abbysshoes\_18, GMonster\_16, HermioneGrange\_17, Monet\_19, Aldrich\_18, Naira\_18, Edtherson\_18, NEHalo\_17, McSinger\_18, DreamCatcher\_20, Carlyle\_19, TheloniousMonk\_19, Buttons\_18, Petruchio\_17, Hope4ever\_17, HanShotFirst\_17, Zephyr\_17, Treddle\_19, CatBus\_18, LilBib\_18, ShortQueendom\_16, JC27\_19, Blackflame\_17, Gyzlar\_19, Rufus\_18, Doom\_18, Zeeculate\_16, Bexan\_16, GroundGoblin\_18, Tripl3t\_18, Noxious\_18, U2\_17, STLscum\_18, Froghopper\_18, Sibs6\_19, Licorice\_19, SarFire\_17, Wheeler\_17,

KikiBouba\_18, Manatee\_18, Marcell\_17, Corvo\_17, Fenn\_18  
 • Track 3 : Lopton\_18, PherrisBueller\_18, Scowl\_18, Big3\_17, Norz\_19  
 • Track 4 : Francis47\_17, Papez\_19, RidgeCB\_17, BaconJack\_19, Marsha\_17, Arcanine\_18, DrFeelGood\_16, Rajelicia\_17, Traft412\_19, Smart\_18, Nhonho\_17  
 • Track 5 : Altman\_19  
 • Track 6 : Pippin\_19, Acme\_19, Ciao\_17  
 • Track 7 : BeesKnees\_18, Topgun\_17, Cueylyss\_17, Violet\_16, PacerPaul\_17, Adahisdi\_18, PascalRango\_16, Puppet\_17, Bones\_17, Oogway\_16, Wilkins\_17, ConceptII\_18, LunarLander\_17  
 • Track 8 : Solon\_17  
 • Track 9 : Snazzy\_15  
 • Track 10 : Smeagol\_19  
 • Track 11 : Hermia\_19  
 • Track 12 : Alsfro\_21, Inyanga\_16, Mkhuseleli\_18, Raid\_18, Iqorha\_16  
 • Track 13 : Ichabod\_18  
 • Track 14 : Turj99\_16  
 • Track 15 : Flutur\_8, AGrandiflora\_8, Tallboi\_8, JohnDoe\_8, Mudpuppy\_8, Tuck\_9, Joemato\_8, Warda\_8, VResidence\_8, Tutumahutu\_8, Lego\_8, Cyan\_8, YesChef\_8, Tbone\_8, Simpson\_8, Powerpuff\_8  
 • Track 16 : ThursdayNight\_7  
 • Track 17 : Pixelle\_8, Phives\_9  
 • Track 18 : Eraser\_8, Elezi\_8, Asa16\_8, Skelbel\_8, London\_8, Subaru\_8, Niobe\_8, Jstan\_8  
 • Track 19 : JuneStar\_8, Sue2\_8  
 • Track 20 : ObiToo\_8, Crewmate\_9  
 • Track 21 : KeAlii\_8  
 • Track 22 : MissSwiss\_8  
 • Track 23 : Adolin\_8, Reedo\_8  
 • Track 24 : TforTroy\_8  
 • Track 25 : Kaylissa\_8  
 • Track 26 : Iter\_8  
 • Track 27 : Berrie\_8, Ascela\_8  
 • Track 28 : DrSierra\_8  
 • Track 29 : Wildwest\_9  
 • Track 30 : Community\_9  
 • Track 31 : Liebe\_7, MaGuCo\_7, IUFootball\_7, Maureen\_7  
 • Track 32 : Tweety19\_8, Snek\_8  
 • Track 33 : Origami\_7, FiveHead\_7, Nitro\_8, Turab\_8, JohnThicc\_7, LadyAstra\_7, IttyBittyPiggy\_8, Amyev\_8, AEgle\_8, Amploria\_8, Adumb2043\_8, Yang\_8, Cassia\_8, Lizalica\_8, Schaffner\_8, Janeemi\_9, Tian\_8, Pumpkins\_8  
 • Track 34 : Emotion\_7  
 • Track 35 : JasmineDragon\_7, ShakeltOph\_7, VroomVroom\_7, MiniMommy\_7  
 • Track 36 : Moss\_8, Halsey\_8, Stuu\_8, Ashes\_8, RockScotty\_8, SpecialK\_8, Mysterium\_8, Beaupre\_8, Giorgio\_8, Gumpizza\_8  
 • Track 37 : Sooty\_8, Gambol\_8, Cappuccino\_8, Donkey\_8, Sabourin\_8, Kalimba\_8  
 • Track 38 : Soondubu\_8, DrManhattan\_8, Exile\_8  
 • Track 39 : AinMach\_8  
 • Track 40 : Bovely\_11, Oliynyk\_12, Rusticus\_12, Ozzie\_11, Aaronocolus\_11, BeardedLady\_12, BryanRecycles\_12, Nerdos\_11, Jash\_12, Esperer\_11, Indigo\_11, Eddasa\_12, SunsetPointe\_11, Legacy\_11, Phettuccine\_11, EnochSoames\_12, Leviticus\_11, Caliburn\_11, Hydra\_13, Unstoppable\_11, Izzy\_12  
 • Track 41 : Goby\_11, Toma\_11

- Track 42 : Hippo\_11, Chucky\_11, Snorlax\_11, SarahRose\_11, Whatever\_11, BarryBee\_13, Emaanora\_13, Werner\_11, TagePhighter\_12
- Track 43 : Katalie\_12, RedBear\_13, Danzina\_12, South40\_12
- Track 44 : Rana\_11, Maneekul\_11, Triste\_11, Dwayne\_11, Yasdnil\_11, Lorelei\_11, Nabi\_11, TuanPN\_11, Asten\_11, Ejemplo\_11, OzzyJ\_12
- Track 45 : Brataylor\_12
- Track 46 : Celeste\_11, Dattran\_12, Zemlya\_12
- Track 47 : Lannister\_12
- Track 48 : Godpower\_12, Lika\_11
- Track 49 : Nanodon\_13
- Track 50 : Sujidade\_12
- Track 51 : TrvxScott\_10
- Track 52 : Paolo\_13, Zainub\_13
- Track 53 : Omar\_12
- Track 54 : Amethyst\_11
- Track 55 : Jevington\_13
- Track 56 : BartholomewSD\_13, Alvy\_13, TinaBelcher\_11
- Track 57 : Triumph\_13, Axiom\_12
- Track 58 : Issmi\_12, Superstar\_13
- Track 59 : SqueakyClean\_12
- Track 60 : Hank144\_12
- Track 61 : Marav\_14
- Track 62 : Daudau\_11
- Track 63 : Bowden\_12
- Track 64 : Loofah\_12, Paedore\_11
- Track 65 : Janus\_12, Animus\_12
- Track 66 : ELB20\_10, R4\_11
- Track 67 : Andris\_11
- Track 68 : GirlDinner\_11
- Track 69 : Puginator\_13
- Track 70 : Nishikigoi\_11, Haizum\_11, Tefunt\_11, Diane\_11
- Track 71 : Caelum\_12
- Track 72 : Thestral\_12
- Track 73 : Pablito\_11
- Track 74 : Kaine\_11, Vanseggelen\_14, Conan\_12, ElGato\_12, Dexers\_10, Alsaber\_12, Sudan\_12, Provolone\_12, Pavo\_12, Jhitchelle\_11
- Track 75 : phiCAM\_12
- Track 76 : Saftant\_11
- Track 77 : Amela\_11, Verse\_11
- Track 78 : Speedwell\_16
- Track 79 : Celery\_14
- Track 80 : ZamZam\_14
- Track 81 : Yosif\_12
- Track 82 : Verabelle\_12
- Track 83 : phiHau3\_13
- Track 84 : GreenWeasel\_13, BroPlease\_12
- Track 85 : VieEnRose\_11
- Track 86 : Urza\_11, Itza\_11, Celia\_11
- Track 87 : Gretchen\_8, SuperHands\_9, Forester\_15
- Track 88 : Zeta1847\_7
- Track 89 : Caron\_7
- Track 90 : Cen1621\_7
- Track 91 : GardenState\_8, IAmGroot\_8

- Track 92 : UtzChips\_7, Barnstormer\_7
- Track 93 : Percival\_8
- Track 94 : Mabodamaca\_8
- Track 95 : Honk\_7
- Track 96 : Floof\_7
- Track 97 : SuMoo\_7
- Track 98 : Footloose\_7
- Track 99 : Attoomi\_8

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

The start number called the most often in the published annotations is 18, it was called in 208 of the 403 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AFIS\_17, Abbyshoes\_18, Abrogate\_180, Acme\_19, Adahisdi\_18, Aeneas\_19, Agaliana\_17, Ajay\_17, Aldrich\_18, Alsfro\_21, Altman\_19, Alvin\_18, Anglerfish\_18, Applejack\_17, Arcanine\_18, Arlo\_16, Ashballer\_16, Atkinbua\_18, BPBiebs31\_18, BaconJack\_19, Barriga\_17, BarrowTuph\_16, Beatrix\_16, BeesKnees\_18, Bethlehem\_17, Bexan\_16, Big3\_17, BigMau\_19, BigPaolini\_18, Bigchungi\_17, Bigfoot\_16, Bircsak\_17, Blackflame\_17, Blessers\_17, BluSpix\_17, Blue\_17, Bob3\_16, Bones\_17, Briton15\_19, Bruns\_16, Burton\_18, Buttons\_18, CactusRose\_16, Carlyle\_19, CartmannCramer\_17, CatBus\_18, Chanagan\_16, ChristmasHams\_17, Ciao\_17, Conceptll\_18, Corvo\_17, Crispicous1\_16, Cueyllyss\_17, DD5\_18, Dexes\_18, Doom\_18, DrFeelGood\_16, DreamCatcher\_20, Dreamboat\_18, Dulcie\_16, Dussy\_18, Dynamix\_18, Edtherson\_18, EnzoK\_18, Espresso\_17, Euphoria\_17, Eyeball\_17, Fajezeel\_19, Fascinus\_16, Fenn\_18, Forsytheast\_16, Francis47\_17, Froghopper\_18, Fushigi\_18, GMonster\_16, Gachnar\_17, GageAP\_19, Gandalf20\_18, Gompeii16\_17, Graduation\_19, GrecoEtereo\_18, Greg\_19, GroundGoblin\_18, Gyzlar\_19, Hami1\_19, HanShotFirst\_17, HarryOW\_18, HermioneGrange\_17, Homines\_17, Hope4ever\_17, ILeeKay\_19, Ichabod\_18, IgnatiusPatJac\_16, Inyanga\_16, Iqorha\_16, JC27\_19, JackSparrow\_18, Jasper\_18, Jerm2\_18, Jorgensen\_17, JuliaChild\_19, KBG\_18, KSSJEB\_17, Kanely\_18, Kenmech\_20, KikiBouba\_18, Killigrew\_15, KyMonks1A\_19, Lamina13\_17, Lesedi\_16, Levia\_17, Licorice\_19, LilBib\_18, Lockley\_17, Lopton\_18, LunarLander\_17, MPlant7149\_16, Magnar\_17, Magnito\_16, Makemake\_17, Manatee\_18, Marcell\_17, Marchy\_16, Marco3\_17, Marge\_18, Maroc7\_16, Marsha\_17, MaryBeth\_17, McGuire\_18, McSinger\_18, MetalQZJ\_17, Michley\_17, MilleFeuille\_14, Mkhuseli\_18, Molly\_18, Monet\_19, Moose\_16, MrGordo\_17, Mryolo\_16, Mule\_17, Museum\_19, NEHalo\_17, Naira\_18, Nerujay\_18, Nhonho\_17, Niza\_19, Norz\_19, Noxious\_18, Ohno789\_17, Oogway\_16, PSullivan\_19, PacerPaul\_17, Papez\_19, Paphu\_16, Paraselene\_16, Pari\_18, Parliament\_16, PascalRango\_16, PattyP\_19, Payneful\_17, Pelly\_18, Pepe\_18, Perseus\_18, Peterson\_20, Petp2012\_19, Petruchio\_17, PherrisBueller\_18, PhineBark\_16, Phlippers\_16, PhrostyMug\_17, PinkPlastic\_16, Pinto\_19, Pippin\_19, Pita2\_19, PowerRanger\_17, ProMouse\_16, Puppet\_17, QTRlifeCrisis\_17, Raid\_18, Rajelicia\_17, Rhynn\_17, RidgeCB\_17, Ringer\_17, Rohr\_18, Rubeus\_18, Rufus\_18, Rutherford\_19, STLscum\_18, Sagefire\_18, Sandaddy\_16, Sanya\_16, SarFire\_17, Scowl\_18, Seabiscuit\_19, Seanderson\_18, ShortQueendom\_16, Sibs6\_19, SkiPole\_19, Slagathor\_18, Smairt\_18, Smeagol\_19, Snazzy\_15, Solon\_17,

Sorpresa\_17, SpikeBT\_19, Squee\_18, StewieG\_16, StrongArm\_16, Sumter\_16, Sunshine924\_16, SwissCheese\_17, Switzer\_18, Swole\_19, Tasp14\_18, Teodoridan\_15, TheloniousMonk\_19, Thor\_17, Topgun\_17, Tote\_19, Traft412\_19, Treddle\_19, Tripl3t\_18, Trouble\_17, Turj99\_16, TwoPeat\_18, U2\_17, Violet\_16, Watermelon\_19, Wheeler\_17, Wilkins\_17, Zeeculate\_16, Zephyr\_17, Zeuska\_18,

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

- Hermia\_19,

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

- AEgle\_8, AGrandiflora\_8, Aaronocolus\_11, Adolin\_8, Adumb2043\_8, AinMach\_8, Alsaber\_12, Alvy\_13, Amela\_11, Amethyst\_11, Amploria\_8, Amyev\_8, Andris\_11, Animus\_12, Asa16\_8, Ascela\_8, Ashes\_8, Asten\_11, Attoomi\_8, Axiom\_12, Barnstormer\_7, BarryBee\_13, BartholomewSD\_13, BeardedLady\_12, Beaupre\_8, Berrie\_8, Bovely\_11, Bowden\_12, Brataylor\_12, BroPlease\_12, BryanRecycles\_12, Caelum\_12, Caliburn\_11, Cappuccino\_8, Caron\_7, Cassia\_8, Celery\_14, Celeste\_11, Celia\_11, Cen1621\_7, Chucky\_11, Community\_9, Conan\_12, Crewmate\_9, Cyan\_8, Danzina\_12, Dattran\_12, Daudau\_11, Dexers\_10, Diane\_11, Donkey\_8, DrManhattan\_8, DrSierra\_8, Dwayne\_11, ELB20\_10, Eddasa\_12, Ejemplo\_11, ElGato\_12, Elezi\_8, Emaanora\_13, Emotion\_7, EnochSoames\_12, Eraser\_8, Esperer\_11, Exile\_8, FiveHead\_7, Floof\_7, Flutur\_8, Footloose\_7, Forester\_15, Gambol\_8, GardenState\_8, Giorgio\_8, GirlDinner\_11, Goby\_11, Godpower\_12, GreenWeasel\_13, Gretchen\_8, Gumpizza\_8, Haizum\_11, Halsey\_8, Hank144\_12, Hippo\_11, Honk\_7, Hydra\_13, IAmGroot\_8, IUFootball\_7, Indigo\_11, Issmi\_12, Iter\_8, IttyBittyPiggy\_8, Itza\_11, Izzy\_12, Janeemi\_9, Janus\_12, Jash\_12, JasmineDragon\_7, Jevington\_13, Jhitchelle\_11, Joemato\_8, JohnDoe\_8, JohnThicc\_7, Jstan\_8, JuneStar\_8, Kaine\_11, Kalimba\_8, Katalie\_12, Kaylissa\_8, KeAlii\_8, LadyAstra\_7, Lannister\_12, Legacy\_11, Lego\_8, Leviticus\_11, Liebe\_7, Lika\_11, Lizalica\_8, London\_8, Loofah\_12, Lorelei\_11, MaGuCo\_7, Mabodamaca\_8, Maneekul\_11, Marav\_14, Maureen\_7, MiniMommy\_7, MissSwiss\_8, Moss\_8, Mudpuppy\_8, Mysterium\_8, Nabi\_11, Nanodon\_13, Nerdos\_11, Niobe\_8, Nishikigoi\_11, Nitro\_8, ObiToo\_8, Oliynyk\_12, Omar\_12, Origami\_7, Ozzie\_11, OzzyJ\_12, Pablito\_11, Paedore\_11, Paolo\_13, Pavo\_12, Percival\_8, Phettuccine\_11, Phives\_9, Pixelle\_8, Powerpuff\_8, Provolone\_12, Puginator\_13, Pumpkins\_8, R4\_11, Rana\_11, RedBear\_13, Reedo\_8, RockScotty\_8, Rusticus\_12, Sabourin\_8, Saftant\_11, SarahRose\_11, Schaffner\_8, ShakeltOph\_7, Simpson\_8, Skelbel\_8, Snek\_8, Snorlax\_11, Soondubu\_8, Sooty\_8, South40\_12, SpecialK\_8, Speedwell\_16, SqueakyClean\_12, Stuu\_8, SuMoo\_7, Subaru\_8, Sudan\_12, Sue2\_8, Sujidade\_12, SunsetPointe\_11, SuperHands\_9, Superstar\_13, TagePighter\_12, Tallboi\_8, Tbone\_8, Tefunt\_11, TforTroy\_8, Thestral\_12, ThursdayNight\_7, Tian\_8, TinaBelcher\_11, Toma\_11, Triste\_11, Triumph\_13, TrvxScott\_10, TuanPN\_11, Tuck\_9, Turab\_8, Tutumahutu\_8, Tweety19\_8, Unstoppable\_11, Urza\_11, UtzChips\_7, VResidence\_8, Vanseggelen\_14, Verabelle\_12, Verse\_11, VieEnRose\_11, VroomVroom\_7, Warda\_8, Werner\_11, Whatever\_11, Wildwest\_9, Yang\_8, Yasdnil\_11, YesChef\_8, Yosif\_12, Zainub\_13, ZamZam\_14, Zemlya\_12, Zeta1847\_7, phiCAM\_12, phiHau3\_13,

## Summary by start number:

Start 1:

- Found in 2 of 459 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 403
- Called 50.0% of time when present

- Phage (with cluster) where this start called: DrSierra\_8 (AZ1),

#### Start 4:

- Found in 6 of 459 ( 1.3% ) of genes in pham
- Manual Annotations of this start: 1 of 403
- Called 16.7% of time when present
- Phage (with cluster) where this start called: TrvxScott\_10 (BD2),

#### Start 5:

- Found in 4 of 459 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 1 of 403
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Hank144\_12 (BD2),

#### Start 6:

- Found in 21 of 459 ( 4.6% ) of genes in pham
- Manual Annotations of this start: 1 of 403
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Sujidade\_12 (BD1),

#### Start 14:

- Found in 111 of 459 ( 24.2% ) of genes in pham
- Manual Annotations of this start: 82 of 403
- Called 93.7% of time when present
- Phage (with cluster) where this start called: AEgle\_8 (AZ1), AGrandiflora\_8 (AZ1), Adolin\_8 (AZ1), Adumb2043\_8 (AZ1), AinMach\_8 (AZ7), Amploria\_8 (AZ1), Amyev\_8 (AZ1), Asa16\_8 (AZ1), Ascela\_8 (AZ1), Ashes\_8 (AZ5), Barnstormer\_7 (EH), Beaupre\_8 (AZ5), Berrie\_8 (AZ1), Cappuccino\_8 (AZ5), Caron\_7 (EH), Cassia\_8 (AZ1), Cen1621\_7 (EH), Community\_9 (AZ1), Crewmate\_9 (AZ1), Cyan\_8 (AZ1), Donkey\_8 (AZ5), DrManhattan\_8 (AZ1), Elezi\_8 (AZ1), Emotion\_7 (AZ4), Eraser\_8 (AZ1), Exile\_8 (AZ6), FiveHead\_7 (AZ4), Floof\_7 (EH), Flutur\_8 (AZ), Forester\_15 (EH), Gambol\_8 (AZ5), GardenState\_8 (EH), Giorgio\_8 (AZ5), Gretchen\_8 (EH), Gumpizza\_8 (AZ5), Halsey\_8 (AZ5), IAmGroot\_8 (EH), IUFootball\_7 (AZ2), IttyBittyPiggy\_8 (AZ1), Janeemi\_9 (AZ1), JasmineDragon\_7 (AZ4), Joemato\_8 (AZ1), JohnDoe\_8 (AZ1), JohnThicc\_7 (AZ4), Jstan\_8 (AZ1), JuneStar\_8 (AZ1), Kalimba\_8 (AZ5), Kaylissa\_8 (AZ1), KeAlii\_8 (AZ1), LadyAstra\_7 (AZ4), Lego\_8 (AZ1), Liebe\_7 (AZ2), Lizalica\_8 (AZ1), London\_8 (AZ1), MaGuCo\_7 (AZ2), Mabodamaca\_8 (EH), Maureen\_7 (AZ2), MiniMommy\_7 (AZ4), MissSwiss\_8 (AZ1), Moss\_8 (AZ5), Mudpuppy\_8 (AZ1), Mystery\_8 (AZ5), Niobe\_8 (AZ1), Nitro\_8 (AZ1), ObiToo\_8 (AZ1), Origami\_7 (AZ4), Percival\_8 (EH), Phives\_9 (AZ1), Pixelle\_8 (AZ1), Powerpuff\_8 (AZ1), Pumpkins\_8 (AZ1), Reedo\_8 (AZ1), RockScotty\_8 (AZ5), Sabourin\_8 (AZ5), Schaffner\_8 (AZ1), ShakeltOph\_7 (AZ4), Simpson\_8 (AZ1), Skelbel\_8 (AZ1), Snek\_8 (AZ3), Soondubu\_8 (AZ6), Sooty\_8 (AZ5), SpecialK\_8 (AZ5), Stuu\_8 (AZ5), SuMoo\_7 (EH), Subaru\_8 (AZ1), Sue2\_8 (AZ1), SuperHands\_9 (EH), Tallboi\_8 (AZ1), Tbone\_8 (AZ1), TforTroy\_8 (AZ1), ThursdayNight\_7 (AZ), Tian\_8 (AZ1), Tuck\_9 (AZ1), Turab\_8 (AZ1), Tutumahutu\_8 (AZ1), Tweety19\_8 (AZ3), UtzChips\_7 (EH), VResidence\_8 (AZ1), VroomVroom\_7 (AZ4), Warda\_8 (AZ1), Wildwest\_9 (AZ1), Yang\_8 (AZ1), YesChef\_8 (AZ1), Zeta1847\_7 (EH),

#### Start 15:

- Found in 1 of 459 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 403
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Honk\_7 (EH),

#### Start 17:

- Found in 117 of 459 ( 25.5% ) of genes in pham
- Manual Annotations of this start: 105 of 403
- Called 97.4% of time when present
- Phage (with cluster) where this start called: Aaronocolus\_11 (BD1), Alsaber\_12 (BD3), Alvy\_13 (BD2), Amela\_11 (BD3), Amethyst\_11 (BD2), Andris\_11 (BD2), Animus\_12 (BD2), Asten\_11 (BD1), Attoomi\_8 (singleton), Axiom\_12 (BD2), BarryBee\_13 (BD1), BartholomewSD\_13 (BD2), BeardedLady\_12 (BD1), Bovely\_11 (BD1), Bowden\_12 (BD2), Brataylor\_12 (BD1), BroPlease\_12 (BD4), BryanRecycles\_12 (BD1), Caelum\_12 (BD2), Caliburn\_11 (BD1), Celery\_14 (BD3), Celeste\_11 (BD1), Celia\_11 (BD6), Chucky\_11 (BD1), Conan\_12 (BD3), Danzina\_12 (BD1), Dattran\_12 (BD1), Daudau\_11 (BD2), Dexers\_10 (BD3), Diane\_11 (BD2), Dwayne\_11 (BD1), ELB20\_10 (BD2), Eddasa\_12 (BD1), Ejemplo\_11 (BD1), ElGato\_12 (BD3), Emaanora\_13 (BD1), EnochSoames\_12 (BD1), Esperer\_11 (BD1), GirlDinner\_11 (BD2), Goby\_11 (BD1), Godpower\_12 (BD1), GreenWeasel\_13 (BD4), Haizum\_11 (BD2), Hippo\_11 (BD1), Hydra\_13 (BD1), Indigo\_11 (BD1), Issmi\_12 (BD2), Itza\_11 (BD6), Izzy\_12 (BD1), Janus\_12 (BD2), Jash\_12 (BD1), Jevington\_13 (BD2), Jhitchelle\_11 (BD3), Kaine\_11 (BD3), Katalie\_12 (BD1), Lannister\_12 (BD1), Legacy\_11 (BD1), Leviticus\_11 (BD1), Lika\_11 (BD1), Loofah\_12 (BD2), Lorelei\_11 (BD1), Maneekul\_11 (BD1), Marav\_14 (BD2), Nabi\_11 (BD1), Nanodon\_13 (BD1), Nerdos\_11 (BD1), Nishikigoi\_11 (BD2), Oliynyk\_12 (BD1), Omar\_12 (BD2), Ozzie\_11 (BD1), OzzyJ\_12 (BD1), Pablito\_11 (BD2), Paedore\_11 (BD2), Paolo\_13 (BD2), Pavo\_12 (BD3), Phettuccine\_11 (BD1), Provolone\_12 (BD3), Puginator\_13 (BD2), R4\_11 (BD2), Rana\_11 (BD1), RedBear\_13 (BD1), Rusticus\_12 (BD1), Saftant\_11 (BD3), SarahRose\_11 (BD1), Snorlax\_11 (BD1), South40\_12 (BD1), Speedwell\_16 (BD3), SqueakyClean\_12 (BD2), Sudan\_12 (BD3), SunsetPointe\_11 (BD1), Superstar\_13 (BD2), TAGEPhighter\_12 (BD1), Tefunt\_11 (BD2), Thestral\_12 (BD2), TinaBelcher\_11 (BD2), Toma\_11 (BD1), Triste\_11 (BD1), Triumph\_13 (BD2), TuanPN\_11 (BD1), Unstoppable\_11 (BD1), Urza\_11 (BD6), Vanseggelen\_14 (BD3), Verabelle\_12 (BD3), Verse\_11 (BD3), VieEnRose\_11 (BD6), Werner\_11 (BD1), Whatever\_11 (BD1), Yasdnil\_11 (BD1), Yosif\_12 (BD3), Zainub\_13 (BD2), ZamZam\_14 (BD3), Zemlya\_12 (BD1), phiCAM\_12 (BD3), phiHau3\_13 (BD4),

#### Start 18:

- Found in 234 of 459 ( 51.0% ) of genes in pham
- Manual Annotations of this start: 208 of 403
- Called 99.6% of time when present
- Phage (with cluster) where this start called: AFIS\_17 (A1), Abbyshoes\_18 (A1), Abrogate\_180 (A1), Acme\_19 (A1), Adahisdi\_18 (A1), Aeneas\_19 (A1), Agaliana\_17 (A1), Ajay\_17 (A1), Aldrich\_18 (A1), Alsfro\_21 (A1), Altman\_19 (A1), Alvin\_18 (A1), Anglerfish\_18 (A1), Applejack\_17 (A1), Arcanine\_18 (A1), Arlo\_16 (A1), Ashballer\_16 (A1), Atkinbua\_18 (A1), BPBiebs31\_18 (A1), BaconJack\_19 (A1), Barriga\_17 (A1), BarrowTuph\_16 (A1), Beatrix\_16 (A1), BeesKnees\_18 (A1), Bethlehem\_17 (A1), Bexan\_16 (A1), Big3\_17 (A1), BigMau\_19 (A1), BigPaolini\_18 (A1), Bigchung\_17 (A1), Bigfoot\_16 (A1), Bircsak\_17 (A1), Blackflame\_17 (A1), Blesser\_17 (A1), BluSpix\_17 (A1), Blue\_17 (A1), Bob3\_16 (A1), Bones\_17 (A1), Briton15\_19 (A1), Bruns\_16 (A1), Burton\_18 (A1), Buttons\_18 (A1), CactusRose\_16 (A1), Carlyle\_19 (A1), CartmannCramer\_17 (A1), CatBus\_18 (A1), Chanagan\_16 (A1), ChristmasHams\_17 (A1), Ciao\_17 (A1), Conceptil\_18 (A1), Corvo\_17 (A1), Crispicous1\_16 (A1), Cueyliss\_17 (A1), DD5\_18 (A1), Dexes\_18 (A1), Doom\_18 (A1), DrFeelGood\_16 (A1), DreamCatcher\_20 (A1), Dreamboat\_18 (A1), Dulcie\_16

(A1), Dussy\_18 (A1), Dynamix\_18 (A1), Edtherson\_18 (A1), EnzoK\_18 (A1), Espresso\_17 (A1), Euphoria\_17 (A1), Eyeball\_17 (A1), Fajezeel\_19 (A1), Fascinus\_16 (A1), Fenn\_18 (A1), Forsytheast\_16 (A1), Francis47\_17 (A1), Froghopper\_18 (A1), Fushigi\_18 (A1), GMonster\_16 (A1), Gachnar\_17 (A1), GageAP\_19 (A1), Gandalf20\_18 (A1), Gompeii16\_17 (A1), Graduation\_19 (A1), GrecoEtereo\_18 (A1), Greg\_19 (A1), GroundGoblin\_18 (A1), Gyzlar\_19 (A1), Hami1\_19 (A1), HanShotFirst\_17 (A1), HarryOW\_18 (A1), HermioneGrange\_17 (A1), Homines\_17 (A1), Hope4ever\_17 (A1), ILeeKay\_19 (A1), Ichabod\_18 (A1), IgnatiusPatJac\_16 (A1), Inyanga\_16 (A1), Iqorha\_16 (A1), JC27\_19 (A1), JackSparrow\_18 (A1), Jasper\_18 (A1), Jerm2\_18 (A1), Jorgensen\_17 (A1), JuliaChild\_19 (A1), KBG\_18 (A1), KSSJEB\_17 (A1), Kanely\_18 (A1), Kenmech\_20 (A1), KikiBouba\_18 (A1), Killigrew\_15 (A1), KyMonks1A\_19 (A1), Lamina13\_17 (A1), Lesedi\_16 (A1), Levia\_17 (A1), Licorice\_19 (A1), LilBib\_18 (A1), Lockley\_17 (A1), Lopton\_18 (A1), LunarLander\_17 (A1), MPlant7149\_16 (A1), Magnar\_17 (A1), Magnito\_16 (A1), Makemake\_17 (A1), Manatee\_18 (A1), Marcell\_17 (A1), Marchy\_16 (A1), Marco3\_17 (A1), Marge\_18 (A1), Maroc7\_16 (A1), Marsha\_17 (A1), MaryBeth\_17 (A1), McGuire\_18 (A1), McSinger\_18 (A1), MetalQZJ\_17 (A1), Michley\_17 (A1), MilleFeuille\_14 (A1), Mkhusei\_18 (A1), Molly\_18 (A1), Monet\_19 (A1), Moose\_16 (A1), MrGordo\_17 (A1), Mryolo\_16 (A1), Mule\_17 (A1), Museum\_19 (A1), NEHalo\_17 (A1), Naira\_18 (A1), Nerujay\_18 (A1), Nhonho\_17 (A1), Niza\_19 (A1), Norz\_19 (A1), Noxious\_18 (A1), Ohno789\_17 (A1), Oogway\_16 (A1), PSullivan\_19 (A1), PacerPaul\_17 (A1), Papez\_19 (A1), Paphu\_16 (A1), Paraselene\_16 (A1), Pari\_18 (A1), Parliament\_16 (A1), PascalRango\_16 (A1), PattyP\_19 (A1), Payneful\_17 (A1), Pelly\_18 (A1), Pepe\_18 (A1), Perseus\_18 (A1), Peterson\_20 (A1), Petp2012\_19 (A1), Petruchio\_17 (A1), PherrisBueller\_18 (A1), PhineBark\_16 (A1), Phlippers\_16 (A1), PhrostyMug\_17 (A1), PinkPlastic\_16 (A1), Pinto\_19 (A1), Pippin\_19 (A1), Pita2\_19 (A1), PowerRanger\_17 (A1), ProMouse\_16 (A1), Puppet\_17 (A1), QTRLifeCrisis\_17 (A1), Raid\_18 (A1), Rajelicia\_17 (A1), Rhynn\_17 (A1), RidgeCB\_17 (A1), Ringer\_17 (A1), Rohr\_18 (A1), Rubeus\_18 (A1), Rufus\_18 (A1), Rutherford\_19 (A1), STLScum\_18 (A1), Sagefire\_18 (A1), Sandaddy\_16 (A1), Sanya\_16 (A1), SarFire\_17 (A1), Scowl\_18 (A1), Seabiscuit\_19 (A1), Seanderson\_18 (A1), ShortQueendom\_16 (A1), Sibs6\_19 (A1), SkiPole\_19 (A1), Slagathor\_18 (A1), Smairt\_18 (A1), Smeagol\_19 (A1), Snazzy\_15 (A1), Solon\_17 (A1), Sorpresa\_17 (A1), SpikeBT\_19 (A1), Squee\_18 (A1), StewieG\_16 (A1), StrongArm\_16 (A1), Sumter\_16 (A1), Sunshine924\_16 (A1), SwissCheese\_17 (A1), Switzer\_18 (A1), Swole\_19 (A1), Tasp14\_18 (A1), Teodoridan\_15 (A1), TheloniousMonk\_19 (A1), Thor\_17 (A1), Topgun\_17 (A1), Tote\_19 (A1), Traft412\_19 (A1), Treddle\_19 (A1), Tripl3t\_18 (A1), Trouble\_17 (A1), Turj99\_16 (A1), TwoPeat\_18 (A1), U2\_17 (A1), Violet\_16 (A1), Watermelon\_19 (A1), Wheeler\_17 (A1), Wilkins\_17 (A1), Zeeculate\_16 (A1), Zephyr\_17 (A1), Zeuska\_18 (A1),

#### Start 22:

- Found in 217 of 459 ( 47.3% ) of genes in pham
- Manual Annotations of this start: 1 of 403
- Called 0.5% of time when present
- Phage (with cluster) where this start called: Hermia\_19 (A1),

#### Start 26:

- Found in 4 of 459 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 1 of 403
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Iter\_8 (AZ1),

Start 28:

- Found in 1 of 459 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 403
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Footloose\_7 (singleton),

### **Summary by clusters:**

There are 16 clusters represented in this pham: singleton, AZ3, EH, A1, BD4, BD6, BD1, BD3, BD2, AZ1, AZ2, AZ, AZ4, AZ5, AZ6, AZ7,

Info for manual annotations of cluster A1:

- Start number 18 was manually annotated 208 times for cluster A1.
- Start number 22 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster AZ1:

- Start number 1 was manually annotated 1 time for cluster AZ1.
- Start number 14 was manually annotated 44 times for cluster AZ1.
- Start number 26 was manually annotated 1 time for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 14 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 14 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 14 was manually annotated 5 times for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 14 was manually annotated 15 times for cluster AZ5.

Info for manual annotations of cluster AZ6:

- Start number 14 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BD1:

- Start number 6 was manually annotated 1 time for cluster BD1.
- Start number 17 was manually annotated 54 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 4 was manually annotated 1 time for cluster BD2.
- Start number 5 was manually annotated 1 time for cluster BD2.
- Start number 17 was manually annotated 31 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 17 was manually annotated 12 times for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 17 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:

- Start number 17 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster EH:

- Start number 14 was manually annotated 12 times for cluster EH.
- Start number 15 was manually annotated 1 time for cluster EH.

### **Gene Information:**

Gene: AEgle\_8 Start: 7858, Stop: 8265, Start Num: 14

Candidate Starts for AEgle\_8:

(Start: 14 @7858 has 82 MA's), (42, 8050), (46, 8095),

Gene: AFIS\_17 Start: 12820, Stop: 13269, Start Num: 18

Candidate Starts for AFIS\_17:

(Start: 18 @12820 has 208 MA's), (Start: 22 @12844 has 1 MA's), (63, 13156), (78, 13231),

Gene: AGrandiflora\_8 Start: 7839, Stop: 8246, Start Num: 14

Candidate Starts for AGrandiflora\_8:

(Start: 14 @7839 has 82 MA's), (42, 8031),

Gene: Aaronocolus\_11 Start: 8395, Stop: 8847, Start Num: 17

Candidate Starts for Aaronocolus\_11:

(10, 8356), (Start: 17 @8395 has 105 MA's), (45, 8587), (65, 8743),

Gene: Abbyshoes\_18 Start: 13206, Stop: 13655, Start Num: 18

Candidate Starts for Abbyshoes\_18:

(Start: 18 @13206 has 208 MA's), (Start: 22 @13230 has 1 MA's), (63, 13542), (78, 13617),

Gene: Abrogate\_180 Start: 13578, Stop: 14027, Start Num: 18

Candidate Starts for Abrogate\_180:

(Start: 18 @13578 has 208 MA's), (Start: 22 @13602 has 1 MA's), (63, 13914), (78, 13989),

Gene: Acme\_19 Start: 13256, Stop: 13705, Start Num: 18

Candidate Starts for Acme\_19:

(Start: 18 @13256 has 208 MA's), (63, 13592), (78, 13667),

Gene: Adahisdi\_18 Start: 13138, Stop: 13587, Start Num: 18

Candidate Starts for Adahisdi\_18:

(Start: 18 @13138 has 208 MA's), (63, 13474), (78, 13549),

Gene: Adolin\_8 Start: 7854, Stop: 8258, Start Num: 14

Candidate Starts for Adolin\_8:

(Start: 14 @7854 has 82 MA's), (38, 8034),

Gene: Adumb2043\_8 Start: 7857, Stop: 8264, Start Num: 14

Candidate Starts for Adumb2043\_8:

(Start: 14 @7857 has 82 MA's), (42, 8049), (46, 8094),

Gene: Aeneas\_19 Start: 13246, Stop: 13695, Start Num: 18

Candidate Starts for Aeneas\_19:

(Start: 18 @13246 has 208 MA's), (Start: 22 @13270 has 1 MA's), (63, 13582), (78, 13657),

Gene: Agaliana\_17 Start: 13198, Stop: 13647, Start Num: 18

Candidate Starts for Agaliana\_17:

(Start: 18 @13198 has 208 MA's), (Start: 22 @13222 has 1 MA's), (63, 13534), (78, 13609),

Gene: AinMach\_8 Start: 7070, Stop: 7495, Start Num: 14

Candidate Starts for AinMach\_8:

(Start: 1 @7010 has 1 MA's), (Start: 14 @7070 has 82 MA's), (29, 7163), (34, 7217), (42, 7262), (54, 7361), (72, 7481),

Gene: Ajay\_17 Start: 12970, Stop: 13419, Start Num: 18

Candidate Starts for Ajay\_17:

(Start: 18 @12970 has 208 MA's), (Start: 22 @12994 has 1 MA's), (63, 13306), (78, 13381),

Gene: Aldrich\_18 Start: 13747, Stop: 14196, Start Num: 18

Candidate Starts for Aldrich\_18:

(Start: 18 @13747 has 208 MA's), (Start: 22 @13771 has 1 MA's), (63, 14083), (78, 14158),

Gene: Alsaber\_12 Start: 8454, Stop: 8915, Start Num: 17

Candidate Starts for Alsaber\_12:

(Start: 17 @8454 has 105 MA's), (21, 8469), (45, 8643), (65, 8799), (84, 8901),

Gene: Alsfro\_21 Start: 13690, Stop: 14139, Start Num: 18

Candidate Starts for Alsfro\_21:

(Start: 18 @13690 has 208 MA's), (Start: 22 @13714 has 1 MA's), (63, 14026), (78, 14101),

Gene: Altman\_19 Start: 13735, Stop: 14184, Start Num: 18

Candidate Starts for Altman\_19:

(Start: 18 @13735 has 208 MA's), (Start: 22 @13759 has 1 MA's), (63, 14071), (78, 14146),

Gene: Alvin\_18 Start: 13456, Stop: 13905, Start Num: 18

Candidate Starts for Alvin\_18:

(Start: 18 @13456 has 208 MA's), (Start: 22 @13480 has 1 MA's), (63, 13792), (78, 13867),

Gene: Alvy\_13 Start: 8321, Stop: 8794, Start Num: 17

Candidate Starts for Alvy\_13:

(Start: 4 @8255 has 1 MA's), (7, 8270), (9, 8276), (Start: 14 @8300 has 82 MA's), (Start: 17 @8321 has 105 MA's), (32, 8435), (45, 8516), (84, 8780),

Gene: Amela\_11 Start: 8566, Stop: 9024, Start Num: 17

Candidate Starts for Amela\_11:

(Start: 17 @8566 has 105 MA's), (27, 8629), (38, 8716), (45, 8755), (65, 8911), (83, 8995), (85, 9019),

Gene: Amethyst\_11 Start: 8131, Stop: 8607, Start Num: 17

Candidate Starts for Amethyst\_11:

(Start: 17 @8131 has 105 MA's), (30, 8218), (45, 8329),

Gene: Amploria\_8 Start: 7857, Stop: 8264, Start Num: 14

Candidate Starts for Amploria\_8:

(Start: 14 @7857 has 82 MA's), (42, 8049), (46, 8094),

Gene: Amyev\_8 Start: 7873, Stop: 8280, Start Num: 14

Candidate Starts for Amyev\_8:

(Start: 14 @7873 has 82 MA's), (42, 8065), (46, 8110),

Gene: Andris\_11 Start: 8194, Stop: 8664, Start Num: 17

Candidate Starts for Andris\_11:

(8, 8146), (Start: 17 @8194 has 105 MA's), (45, 8392), (56, 8479), (61, 8506), (70, 8584), (76, 8599),

Gene: Anglerfish\_18 Start: 14118, Stop: 14567, Start Num: 18

Candidate Starts for Anglerfish\_18:

(Start: 18 @14118 has 208 MA's), (Start: 22 @14142 has 1 MA's), (63, 14454), (78, 14529),

Gene: Animus\_12 Start: 8547, Stop: 9035, Start Num: 17

Candidate Starts for Animus\_12:

(3, 8478), (Start: 17 @8547 has 105 MA's), (31, 8658), (35, 8688), (45, 8745), (61, 8859), (65, 8901), (66, 8907), (79, 8976),

Gene: Applejack\_17 Start: 12895, Stop: 13344, Start Num: 18

Candidate Starts for Applejack\_17:

(Start: 18 @12895 has 208 MA's), (Start: 22 @12919 has 1 MA's), (63, 13231), (78, 13306),

Gene: Arcanine\_18 Start: 13137, Stop: 13586, Start Num: 18

Candidate Starts for Arcanine\_18:

(Start: 18 @13137 has 208 MA's), (Start: 22 @13161 has 1 MA's), (63, 13473), (78, 13548),

Gene: Arlo\_16 Start: 12516, Stop: 12965, Start Num: 18

Candidate Starts for Arlo\_16:

(Start: 18 @12516 has 208 MA's), (Start: 22 @12540 has 1 MA's), (63, 12852), (78, 12927),

Gene: Asa16\_8 Start: 7826, Stop: 8233, Start Num: 14

Candidate Starts for Asa16\_8:

(Start: 14 @7826 has 82 MA's), (41, 8015), (42, 8018), (44, 8024), (46, 8063),

Gene: Ascela\_8 Start: 7852, Stop: 8259, Start Num: 14

Candidate Starts for Ascela\_8:

(Start: 14 @7852 has 82 MA's), (Start: 26 @7909 has 1 MA's), (42, 8044), (46, 8089),

Gene: Ashballer\_16 Start: 12899, Stop: 13348, Start Num: 18

Candidate Starts for Ashballer\_16:

(Start: 18 @12899 has 208 MA's), (Start: 22 @12923 has 1 MA's), (63, 13235), (78, 13310),

Gene: Ashes\_8 Start: 7343, Stop: 7810, Start Num: 14

Candidate Starts for Ashes\_8:

(2, 7292), (Start: 14 @7343 has 82 MA's), (40, 7535), (50, 7616),

Gene: Asten\_11 Start: 8357, Stop: 8806, Start Num: 17

Candidate Starts for Asten\_11:

(Start: 6 @8300 has 1 MA's), (Start: 17 @8357 has 105 MA's), (45, 8546), (76, 8750),

Gene: Atkinbua\_18 Start: 12870, Stop: 13319, Start Num: 18

Candidate Starts for Atkinbua\_18:

(Start: 18 @12870 has 208 MA's), (Start: 22 @12894 has 1 MA's), (63, 13206), (78, 13281),

Gene: Attoomi\_8 Start: 6589, Stop: 6960, Start Num: 17

Candidate Starts for Attoomi\_8:

(Start: 17 @6589 has 105 MA's), (19, 6598), (21, 6607), (39, 6751), (55, 6856), (60, 6883), (67, 6934),

Gene: Axiom\_12 Start: 8226, Stop: 8696, Start Num: 17

Candidate Starts for Axiom\_12:

(Start: 17 @8226 has 105 MA's), (45, 8424), (61, 8538), (70, 8616),

Gene: BPBiebs31\_18 Start: 13162, Stop: 13611, Start Num: 18

Candidate Starts for BPBiebs31\_18:

(Start: 18 @13162 has 208 MA's), (Start: 22 @13186 has 1 MA's), (63, 13498), (78, 13573),

Gene: BaconJack\_19 Start: 13237, Stop: 13686, Start Num: 18

Candidate Starts for BaconJack\_19:

(Start: 18 @13237 has 208 MA's), (Start: 22 @13261 has 1 MA's), (63, 13573), (78, 13648),

Gene: Barnstormer\_7 Start: 7106, Stop: 7585, Start Num: 14

Candidate Starts for Barnstormer\_7:

(13, 7100), (Start: 14 @7106 has 82 MA's), (80, 7577),

Gene: Barriga\_17 Start: 12765, Stop: 13214, Start Num: 18

Candidate Starts for Barriga\_17:

(Start: 18 @12765 has 208 MA's), (Start: 22 @12789 has 1 MA's), (63, 13101), (78, 13176),

Gene: BarrowTuph\_16 Start: 12810, Stop: 13259, Start Num: 18

Candidate Starts for BarrowTuph\_16:

(Start: 18 @12810 has 208 MA's), (Start: 22 @12834 has 1 MA's), (63, 13146), (78, 13221),

Gene: BarryBee\_13 Start: 8364, Stop: 8813, Start Num: 17

Candidate Starts for BarryBee\_13:

(Start: 17 @8364 has 105 MA's), (45, 8553), (76, 8757),

Gene: BartholomewSD\_13 Start: 8321, Stop: 8794, Start Num: 17

Candidate Starts for BartholomewSD\_13:

(Start: 4 @8255 has 1 MA's), (7, 8270), (9, 8276), (Start: 14 @8300 has 82 MA's), (Start: 17 @8321 has 105 MA's), (32, 8435), (45, 8516), (84, 8780),

Gene: BeardedLady\_12 Start: 8642, Stop: 9094, Start Num: 17

Candidate Starts for BeardedLady\_12:

(10, 8603), (Start: 17 @8642 has 105 MA's), (45, 8834), (65, 8990),

Gene: Beatrix\_16 Start: 13614, Stop: 14063, Start Num: 18

Candidate Starts for Beatrix\_16:

(Start: 18 @13614 has 208 MA's), (Start: 22 @13638 has 1 MA's), (63, 13950), (78, 14025),

Gene: Beaupre\_8 Start: 7344, Stop: 7811, Start Num: 14

Candidate Starts for Beaupre\_8:

(2, 7293), (Start: 14 @7344 has 82 MA's), (40, 7536), (50, 7617),

Gene: BeesKnees\_18 Start: 12955, Stop: 13404, Start Num: 18

Candidate Starts for BeesKnees\_18:

(Start: 18 @12955 has 208 MA's), (63, 13291), (78, 13366),

Gene: Berrie\_8 Start: 7831, Stop: 8238, Start Num: 14

Candidate Starts for Berrie\_8:

(Start: 14 @7831 has 82 MA's), (Start: 26 @7888 has 1 MA's), (42, 8023), (46, 8068),

Gene: Bethlehem\_17 Start: 14192, Stop: 14641, Start Num: 18

Candidate Starts for Bethlehem\_17:

(Start: 18 @14192 has 208 MA's), (Start: 22 @14216 has 1 MA's), (63, 14528), (78, 14603),

Gene: Bexan\_16 Start: 13900, Stop: 14349, Start Num: 18

Candidate Starts for Bexan\_16:

(Start: 18 @13900 has 208 MA's), (Start: 22 @13924 has 1 MA's), (63, 14236), (78, 14311),

Gene: Big3\_17 Start: 13546, Stop: 13995, Start Num: 18

Candidate Starts for Big3\_17:

(Start: 18 @13546 has 208 MA's), (Start: 22 @13570 has 1 MA's), (78, 13957),

Gene: BigMau\_19 Start: 13123, Stop: 13572, Start Num: 18

Candidate Starts for BigMau\_19:

(Start: 18 @13123 has 208 MA's), (Start: 22 @13147 has 1 MA's), (63, 13459), (78, 13534),

Gene: BigPaolini\_18 Start: 13549, Stop: 13998, Start Num: 18

Candidate Starts for BigPaolini\_18:

(Start: 18 @13549 has 208 MA's), (Start: 22 @13573 has 1 MA's), (63, 13885), (78, 13960),

Gene: Bigchungi\_17 Start: 12923, Stop: 13372, Start Num: 18

Candidate Starts for Bigchungi\_17:

(Start: 18 @12923 has 208 MA's), (Start: 22 @12947 has 1 MA's), (63, 13259), (78, 13334),

Gene: Bigfoot\_16 Start: 12651, Stop: 13100, Start Num: 18

Candidate Starts for Bigfoot\_16:

(Start: 18 @12651 has 208 MA's), (Start: 22 @12675 has 1 MA's), (63, 12987), (78, 13062),

Gene: Bircsak\_17 Start: 13409, Stop: 13858, Start Num: 18

Candidate Starts for Bircsak\_17:

(Start: 18 @13409 has 208 MA's), (Start: 22 @13433 has 1 MA's), (63, 13745), (78, 13820),

Gene: Blackflame\_17 Start: 12932, Stop: 13381, Start Num: 18

Candidate Starts for Blackflame\_17:

(Start: 18 @12932 has 208 MA's), (Start: 22 @12956 has 1 MA's), (63, 13268), (78, 13343),

Gene: Blesser\_17 Start: 13221, Stop: 13670, Start Num: 18

Candidate Starts for Blesser\_17:

(Start: 18 @13221 has 208 MA's), (Start: 22 @13245 has 1 MA's), (63, 13557), (78, 13632),

Gene: BluSpix\_17 Start: 12911, Stop: 13360, Start Num: 18

Candidate Starts for BluSpix\_17:

(Start: 18 @12911 has 208 MA's), (Start: 22 @12935 has 1 MA's), (63, 13247), (78, 13322),

Gene: Blue\_17 Start: 13014, Stop: 13463, Start Num: 18

Candidate Starts for Blue\_17:

(Start: 18 @13014 has 208 MA's), (Start: 22 @13038 has 1 MA's), (63, 13350), (78, 13425),

Gene: Bob3\_16 Start: 12463, Stop: 12912, Start Num: 18

Candidate Starts for Bob3\_16:

(Start: 18 @12463 has 208 MA's), (Start: 22 @12487 has 1 MA's), (63, 12799), (78, 12874),

Gene: Bones\_17 Start: 12652, Stop: 13101, Start Num: 18

Candidate Starts for Bones\_17:

(Start: 18 @12652 has 208 MA's), (63, 12988), (78, 13063),

Gene: Bovely\_11 Start: 8401, Stop: 8853, Start Num: 17

Candidate Starts for Bovely\_11:

(10, 8362), (Start: 17 @8401 has 105 MA's), (45, 8593), (65, 8749),

Gene: Bowden\_12 Start: 8235, Stop: 8708, Start Num: 17

Candidate Starts for Bowden\_12:

(Start: 4 @8169 has 1 MA's), (7, 8184), (9, 8190), (Start: 14 @8214 has 82 MA's), (Start: 17 @8235 has 105 MA's), (32, 8349), (45, 8430), (68, 8610), (84, 8694),

Gene: Brataylor\_12 Start: 8367, Stop: 8816, Start Num: 17

Candidate Starts for Brataylor\_12:

(10, 8328), (Start: 17 @8367 has 105 MA's), (38, 8517), (39, 8520), (45, 8556),

Gene: Briton15\_19 Start: 13212, Stop: 13661, Start Num: 18

Candidate Starts for Briton15\_19:

(Start: 18 @13212 has 208 MA's), (Start: 22 @13236 has 1 MA's), (63, 13548), (78, 13623),

Gene: BroPlease\_12 Start: 8450, Stop: 8917, Start Num: 17

Candidate Starts for BroPlease\_12:

(Start: 17 @8450 has 105 MA's), (38, 8600), (39, 8603), (45, 8639), (56, 8726), (68, 8819), (73, 8837), (84, 8903),

Gene: Bruns\_16 Start: 12835, Stop: 13284, Start Num: 18

Candidate Starts for Bruns\_16:

(Start: 18 @12835 has 208 MA's), (Start: 22 @12859 has 1 MA's), (63, 13171), (78, 13246),

Gene: BryanRecycles\_12 Start: 8558, Stop: 9010, Start Num: 17

Candidate Starts for BryanRecycles\_12:

(10, 8519), (Start: 17 @8558 has 105 MA's), (45, 8750), (65, 8906),

Gene: Burton\_18 Start: 13033, Stop: 13482, Start Num: 18

Candidate Starts for Burton\_18:

(Start: 18 @13033 has 208 MA's), (Start: 22 @13057 has 1 MA's), (63, 13369), (78, 13444),

Gene: Buttons\_18 Start: 13397, Stop: 13846, Start Num: 18

Candidate Starts for Buttons\_18:

(Start: 18 @13397 has 208 MA's), (Start: 22 @13421 has 1 MA's), (63, 13733), (78, 13808),

Gene: CactusRose\_16 Start: 12650, Stop: 13099, Start Num: 18

Candidate Starts for CactusRose\_16:

(Start: 18 @12650 has 208 MA's), (Start: 22 @12674 has 1 MA's), (63, 12986), (78, 13061),

Gene: Caelum\_12 Start: 8087, Stop: 8563, Start Num: 17

Candidate Starts for Caelum\_12:

(Start: 17 @8087 has 105 MA's), (45, 8285), (84, 8549),

Gene: Caliburn\_11 Start: 8375, Stop: 8827, Start Num: 17

Candidate Starts for Caliburn\_11:

(10, 8336), (Start: 17 @8375 has 105 MA's), (45, 8567), (65, 8723),

Gene: Cappuccino\_8 Start: 7252, Stop: 7719, Start Num: 14

Candidate Starts for Cappuccino\_8:

(2, 7201), (Start: 14 @7252 has 82 MA's), (40, 7444), (50, 7525), (58, 7576),

Gene: Carlyle\_19 Start: 13779, Stop: 14228, Start Num: 18

Candidate Starts for Carlyle\_19:

(Start: 18 @13779 has 208 MA's), (Start: 22 @13803 has 1 MA's), (63, 14115), (78, 14190),

Gene: Caron\_7 Start: 7134, Stop: 7613, Start Num: 14

Candidate Starts for Caron\_7:

(Start: 14 @7134 has 82 MA's), (74, 7554), (80, 7605),

Gene: CartmannCramer\_17 Start: 14747, Stop: 15196, Start Num: 18

Candidate Starts for CartmannCramer\_17:

(Start: 18 @14747 has 208 MA's), (Start: 22 @14771 has 1 MA's), (63, 15083), (78, 15158),

Gene: Cassia\_8 Start: 7956, Stop: 8351, Start Num: 14

Candidate Starts for Cassia\_8:

(Start: 14 @7956 has 82 MA's), (42, 8148), (46, 8193),

Gene: CatBus\_18 Start: 13939, Stop: 14388, Start Num: 18

Candidate Starts for CatBus\_18:

(Start: 18 @13939 has 208 MA's), (Start: 22 @13963 has 1 MA's), (63, 14275), (78, 14350),

Gene: Celery\_14 Start: 8413, Stop: 8874, Start Num: 17

Candidate Starts for Celery\_14:

(Start: 17 @8413 has 105 MA's), (21, 8428), (45, 8602), (65, 8758), (77, 8818), (83, 8845), (84, 8860),

Gene: Celeste\_11 Start: 8365, Stop: 8814, Start Num: 17

Candidate Starts for Celeste\_11:

(Start: 6 @8308 has 1 MA's), (Start: 17 @8365 has 105 MA's), (38, 8515), (39, 8518), (45, 8554),

Gene: Celia\_11 Start: 8664, Stop: 9149, Start Num: 17

Candidate Starts for Celia\_11:

(Start: 17 @8664 has 105 MA's), (39, 8817), (45, 8853), (56, 8940),

Gene: Cen1621\_7 Start: 6257, Stop: 6748, Start Num: 14

Candidate Starts for Cen1621\_7:

(Start: 14 @6257 has 82 MA's), (77, 6710),

Gene: Chanagan\_16 Start: 12489, Stop: 12938, Start Num: 18

Candidate Starts for Chanagan\_16:

(Start: 18 @12489 has 208 MA's), (Start: 22 @12513 has 1 MA's), (63, 12825), (78, 12900),

Gene: ChristmasHams\_17 Start: 12957, Stop: 13406, Start Num: 18

Candidate Starts for ChristmasHams\_17:

(Start: 18 @12957 has 208 MA's), (Start: 22 @12981 has 1 MA's), (63, 13293), (78, 13368),

Gene: Chucky\_11 Start: 8365, Stop: 8814, Start Num: 17

Candidate Starts for Chucky\_11:

(Start: 17 @8365 has 105 MA's), (45, 8554), (76, 8758),

Gene: Ciao\_17 Start: 12876, Stop: 13325, Start Num: 18  
Candidate Starts for Ciao\_17:  
(Start: 18 @12876 has 208 MA's), (63, 13212), (78, 13287),

Gene: Community\_9 Start: 8908, Stop: 9315, Start Num: 14  
Candidate Starts for Community\_9:  
(Start: 14 @8908 has 82 MA's), (38, 9088), (41, 9097), (42, 9100), (44, 9106),

Gene: Conan\_12 Start: 8164, Stop: 8625, Start Num: 17  
Candidate Starts for Conan\_12:  
(Start: 17 @8164 has 105 MA's), (21, 8179), (45, 8353), (65, 8509), (84, 8611),

Gene: ConceptII\_18 Start: 13371, Stop: 13820, Start Num: 18  
Candidate Starts for ConceptII\_18:  
(Start: 18 @13371 has 208 MA's), (63, 13707), (78, 13782),

Gene: Corvo\_17 Start: 13368, Stop: 13817, Start Num: 18  
Candidate Starts for Corvo\_17:  
(Start: 18 @13368 has 208 MA's), (Start: 22 @13392 has 1 MA's), (63, 13704), (78, 13779),

Gene: Crewmate\_9 Start: 8291, Stop: 8698, Start Num: 14  
Candidate Starts for Crewmate\_9:  
(Start: 14 @8291 has 82 MA's), (38, 8471), (42, 8483), (46, 8528),

Gene: Crispicous1\_16 Start: 12360, Stop: 12809, Start Num: 18  
Candidate Starts for Crispicous1\_16:  
(Start: 18 @12360 has 208 MA's), (Start: 22 @12384 has 1 MA's), (63, 12696), (78, 12771),

Gene: Cueylyss\_17 Start: 13061, Stop: 13510, Start Num: 18  
Candidate Starts for Cueylyss\_17:  
(Start: 18 @13061 has 208 MA's), (63, 13397), (78, 13472),

Gene: Cyan\_8 Start: 7843, Stop: 8250, Start Num: 14  
Candidate Starts for Cyan\_8:  
(Start: 14 @7843 has 82 MA's), (42, 8035),

Gene: DD5\_18 Start: 13610, Stop: 14059, Start Num: 18  
Candidate Starts for DD5\_18:  
(Start: 18 @13610 has 208 MA's), (Start: 22 @13634 has 1 MA's), (63, 13946), (78, 14021),

Gene: Danzina\_12 Start: 8569, Stop: 9018, Start Num: 17  
Candidate Starts for Danzina\_12:  
(Start: 6 @8512 has 1 MA's), (Start: 17 @8569 has 105 MA's), (45, 8758),

Gene: Dattran\_12 Start: 8364, Stop: 8813, Start Num: 17  
Candidate Starts for Dattran\_12:  
(Start: 6 @8307 has 1 MA's), (Start: 17 @8364 has 105 MA's), (38, 8514), (39, 8517), (45, 8553),

Gene: Daudau\_11 Start: 8198, Stop: 8698, Start Num: 17  
Candidate Starts for Daudau\_11:  
(9, 8156), (Start: 17 @8198 has 105 MA's), (45, 8396), (62, 8516), (65, 8552), (66, 8558),

Gene: Dexers\_10 Start: 8157, Stop: 8618, Start Num: 17

Candidate Starts for Dexers\_10:

(Start: 17 @8157 has 105 MA's), (21, 8172), (45, 8346), (65, 8502), (84, 8604),

Gene: Dexes\_18 Start: 13576, Stop: 14025, Start Num: 18

Candidate Starts for Dexes\_18:

(Start: 18 @13576 has 208 MA's), (Start: 22 @13600 has 1 MA's), (63, 13912), (78, 13987),

Gene: Diane\_11 Start: 8130, Stop: 8606, Start Num: 17

Candidate Starts for Diane\_11:

(Start: 17 @8130 has 105 MA's), (39, 8292), (45, 8328),

Gene: Donkey\_8 Start: 7252, Stop: 7719, Start Num: 14

Candidate Starts for Donkey\_8:

(2, 7201), (Start: 14 @7252 has 82 MA's), (40, 7444), (50, 7525), (58, 7576),

Gene: Doom\_18 Start: 13634, Stop: 14083, Start Num: 18

Candidate Starts for Doom\_18:

(Start: 18 @13634 has 208 MA's), (Start: 22 @13658 has 1 MA's), (63, 13970), (78, 14045),

Gene: DrFeelGood\_16 Start: 12986, Stop: 13435, Start Num: 18

Candidate Starts for DrFeelGood\_16:

(Start: 18 @12986 has 208 MA's), (Start: 22 @13010 has 1 MA's), (63, 13322), (78, 13397),

Gene: DrManhattan\_8 Start: 7844, Stop: 8248, Start Num: 14

Candidate Starts for DrManhattan\_8:

(Start: 14 @7844 has 82 MA's), (38, 8024), (42, 8036),

Gene: DrSierra\_8 Start: 7783, Stop: 8259, Start Num: 1

Candidate Starts for DrSierra\_8:

(Start: 1 @7783 has 1 MA's), (11, 7828), (16, 7855),

Gene: DreamCatcher\_20 Start: 14343, Stop: 14792, Start Num: 18

Candidate Starts for DreamCatcher\_20:

(Start: 18 @14343 has 208 MA's), (Start: 22 @14367 has 1 MA's), (63, 14679), (78, 14754),

Gene: Dreamboat\_18 Start: 12810, Stop: 13259, Start Num: 18

Candidate Starts for Dreamboat\_18:

(Start: 18 @12810 has 208 MA's), (Start: 22 @12834 has 1 MA's), (63, 13146), (78, 13221),

Gene: Dulcie\_16 Start: 12552, Stop: 13001, Start Num: 18

Candidate Starts for Dulcie\_16:

(Start: 18 @12552 has 208 MA's), (Start: 22 @12576 has 1 MA's), (63, 12888), (78, 12963),

Gene: Dussy\_18 Start: 13206, Stop: 13655, Start Num: 18

Candidate Starts for Dussy\_18:

(Start: 18 @13206 has 208 MA's), (Start: 22 @13230 has 1 MA's), (63, 13542), (78, 13617),

Gene: Dwayne\_11 Start: 8364, Stop: 8813, Start Num: 17

Candidate Starts for Dwayne\_11:

(Start: 6 @8307 has 1 MA's), (Start: 17 @8364 has 105 MA's), (45, 8553), (76, 8757),

Gene: Dynamix\_18 Start: 12962, Stop: 13411, Start Num: 18

Candidate Starts for Dynamix\_18:

(Start: 18 @12962 has 208 MA's), (Start: 22 @12986 has 1 MA's), (63, 13298), (78, 13373),

Gene: ELB20\_10 Start: 8214, Stop: 8711, Start Num: 17

Candidate Starts for ELB20\_10:

(Start: 17 @8214 has 105 MA's), (42, 8385), (45, 8412), (61, 8526), (65, 8568), (66, 8574), (84, 8697),

Gene: Eddasa\_12 Start: 8558, Stop: 9010, Start Num: 17

Candidate Starts for Eddasa\_12:

(10, 8519), (Start: 17 @8558 has 105 MA's), (45, 8750), (65, 8906),

Gene: Edtherson\_18 Start: 13704, Stop: 14153, Start Num: 18

Candidate Starts for Edtherson\_18:

(Start: 18 @13704 has 208 MA's), (Start: 22 @13728 has 1 MA's), (63, 14040), (78, 14115),

Gene: Ejemplo\_11 Start: 8367, Stop: 8816, Start Num: 17

Candidate Starts for Ejemplo\_11:

(Start: 6 @8310 has 1 MA's), (Start: 17 @8367 has 105 MA's), (45, 8556), (76, 8760),

Gene: ElGato\_12 Start: 8167, Stop: 8628, Start Num: 17

Candidate Starts for ElGato\_12:

(Start: 17 @8167 has 105 MA's), (21, 8182), (45, 8356), (65, 8512), (84, 8614),

Gene: Elezi\_8 Start: 7827, Stop: 8234, Start Num: 14

Candidate Starts for Elezi\_8:

(Start: 14 @7827 has 82 MA's), (41, 8016), (42, 8019), (44, 8025), (46, 8064),

Gene: Emaanora\_13 Start: 8364, Stop: 8813, Start Num: 17

Candidate Starts for Emaanora\_13:

(Start: 17 @8364 has 105 MA's), (45, 8553), (76, 8757),

Gene: Emotion\_7 Start: 6195, Stop: 6596, Start Num: 14

Candidate Starts for Emotion\_7:

(Start: 14 @6195 has 82 MA's),

Gene: EnochSoames\_12 Start: 8554, Stop: 9006, Start Num: 17

Candidate Starts for EnochSoames\_12:

(10, 8515), (Start: 17 @8554 has 105 MA's), (45, 8746), (65, 8902),

Gene: EnzoK\_18 Start: 13144, Stop: 13593, Start Num: 18

Candidate Starts for EnzoK\_18:

(Start: 18 @13144 has 208 MA's), (Start: 22 @13168 has 1 MA's), (63, 13480), (78, 13555),

Gene: Eraser\_8 Start: 7827, Stop: 8234, Start Num: 14

Candidate Starts for Eraser\_8:

(Start: 14 @7827 has 82 MA's), (41, 8016), (42, 8019), (44, 8025), (46, 8064),

Gene: Esperer\_11 Start: 8395, Stop: 8847, Start Num: 17

Candidate Starts for Esperer\_11:

(10, 8356), (Start: 17 @8395 has 105 MA's), (45, 8587), (65, 8743),

Gene: Espresso\_17 Start: 13014, Stop: 13463, Start Num: 18

Candidate Starts for Espresso\_17:

(Start: 18 @13014 has 208 MA's), (Start: 22 @13038 has 1 MA's), (63, 13350), (78, 13425),

Gene: Euphoria\_17 Start: 12906, Stop: 13355, Start Num: 18

Candidate Starts for Euphoria\_17:

(Start: 18 @12906 has 208 MA's), (Start: 22 @12930 has 1 MA's), (63, 13242), (78, 13317),

Gene: Exile\_8 Start: 7864, Stop: 8262, Start Num: 14

Candidate Starts for Exile\_8:

(Start: 14 @7864 has 82 MA's), (38, 8044), (42, 8056),

Gene: Eyeball\_17 Start: 12645, Stop: 13094, Start Num: 18

Candidate Starts for Eyeball\_17:

(Start: 18 @12645 has 208 MA's), (Start: 22 @12669 has 1 MA's), (63, 12981), (78, 13056),

Gene: Fajezeel\_19 Start: 13225, Stop: 13674, Start Num: 18

Candidate Starts for Fajezeel\_19:

(Start: 18 @13225 has 208 MA's), (Start: 22 @13249 has 1 MA's), (63, 13561), (78, 13636),

Gene: Fascinus\_16 Start: 12648, Stop: 13097, Start Num: 18

Candidate Starts for Fascinus\_16:

(Start: 18 @12648 has 208 MA's), (Start: 22 @12672 has 1 MA's), (63, 12984), (78, 13059),

Gene: Fenn\_18 Start: 14453, Stop: 14902, Start Num: 18

Candidate Starts for Fenn\_18:

(Start: 18 @14453 has 208 MA's), (Start: 22 @14477 has 1 MA's), (63, 14789), (78, 14864),

Gene: FiveHead\_7 Start: 6168, Stop: 6569, Start Num: 14

Candidate Starts for FiveHead\_7:

(Start: 14 @6168 has 82 MA's), (42, 6360), (46, 6405),

Gene: Floof\_7 Start: 6625, Stop: 7029, Start Num: 14

Candidate Starts for Floof\_7:

(Start: 14 @6625 has 82 MA's), (23, 6670), (50, 6895), (51, 6901),

Gene: Flutur\_8 Start: 7842, Stop: 8249, Start Num: 14

Candidate Starts for Flutur\_8:

(Start: 14 @7842 has 82 MA's), (42, 8034),

Gene: Footloose\_7 Start: 5771, Stop: 6229, Start Num: 28

Candidate Starts for Footloose\_7:

(Start: 28 @5771 has 1 MA's), (37, 5867), (47, 5942), (48, 5951), (49, 5963), (52, 5978), (61, 6032), (69, 6101), (75, 6143), (81, 6188),

Gene: Forester\_15 Start: 8209, Stop: 8697, Start Num: 14

Candidate Starts for Forester\_15:

(Start: 14 @8209 has 82 MA's), (23, 8254), (50, 8479), (57, 8524), (71, 8617),

Gene: Forsytheast\_16 Start: 12915, Stop: 13364, Start Num: 18

Candidate Starts for Forsytheast\_16:

(Start: 18 @12915 has 208 MA's), (Start: 22 @12939 has 1 MA's), (63, 13251), (78, 13326),

Gene: Francis47\_17 Start: 13462, Stop: 13911, Start Num: 18

Candidate Starts for Francis47\_17:

(Start: 18 @13462 has 208 MA's), (Start: 22 @13486 has 1 MA's), (63, 13798), (78, 13873),

Gene: Froghopper\_18 Start: 12878, Stop: 13327, Start Num: 18

Candidate Starts for Froghopper\_18:

(Start: 18 @12878 has 208 MA's), (Start: 22 @12902 has 1 MA's), (63, 13214), (78, 13289),

Gene: Fushigi\_18 Start: 13325, Stop: 13774, Start Num: 18

Candidate Starts for Fushigi\_18:

(Start: 18 @13325 has 208 MA's), (Start: 22 @13349 has 1 MA's), (63, 13661), (78, 13736),

Gene: GMonster\_16 Start: 12761, Stop: 13210, Start Num: 18

Candidate Starts for GMonster\_16:

(Start: 18 @12761 has 208 MA's), (Start: 22 @12785 has 1 MA's), (63, 13097), (78, 13172),

Gene: Gachnar\_17 Start: 12936, Stop: 13385, Start Num: 18

Candidate Starts for Gachnar\_17:

(Start: 18 @12936 has 208 MA's), (Start: 22 @12960 has 1 MA's), (63, 13272), (78, 13347),

Gene: GageAP\_19 Start: 13642, Stop: 14091, Start Num: 18

Candidate Starts for GageAP\_19:

(Start: 18 @13642 has 208 MA's), (Start: 22 @13666 has 1 MA's), (63, 13978), (78, 14053),

Gene: Gambol\_8 Start: 7252, Stop: 7719, Start Num: 14

Candidate Starts for Gambol\_8:

(2, 7201), (Start: 14 @7252 has 82 MA's), (40, 7444), (50, 7525), (58, 7576),

Gene: Gandalf20\_18 Start: 13709, Stop: 14158, Start Num: 18

Candidate Starts for Gandalf20\_18:

(Start: 18 @13709 has 208 MA's), (Start: 22 @13733 has 1 MA's), (63, 14045), (78, 14120),

Gene: GardenState\_8 Start: 7336, Stop: 7818, Start Num: 14

Candidate Starts for GardenState\_8:

(Start: 14 @7336 has 82 MA's), (23, 7387),

Gene: Giorgio\_8 Start: 7345, Stop: 7812, Start Num: 14

Candidate Starts for Giorgio\_8:

(2, 7294), (Start: 14 @7345 has 82 MA's), (40, 7537), (50, 7618),

Gene: GirlDinner\_11 Start: 8209, Stop: 8697, Start Num: 17

Candidate Starts for GirlDinner\_11:

(Start: 17 @8209 has 105 MA's), (31, 8320), (35, 8350), (45, 8407), (61, 8521), (65, 8563), (66, 8569), (79, 8638),

Gene: Goby\_11 Start: 8367, Stop: 8816, Start Num: 17

Candidate Starts for Goby\_11:

(Start: 6 @8310 has 1 MA's), (Start: 17 @8367 has 105 MA's), (45, 8556), (65, 8712),

Gene: Godpower\_12 Start: 8382, Stop: 8831, Start Num: 17

Candidate Starts for Godpower\_12:

(Start: 17 @8382 has 105 MA's), (45, 8571), (65, 8727),

Gene: Gompeii16\_17 Start: 13410, Stop: 13859, Start Num: 18

Candidate Starts for Gompeii16\_17:

(Start: 18 @13410 has 208 MA's), (Start: 22 @13434 has 1 MA's), (63, 13746), (78, 13821),

Gene: Graduation\_19 Start: 13675, Stop: 14124, Start Num: 18

Candidate Starts for Graduation\_19:

(Start: 18 @13675 has 208 MA's), (Start: 22 @13699 has 1 MA's), (63, 14011), (78, 14086),

Gene: GrecoEtereo\_18 Start: 13216, Stop: 13665, Start Num: 18

Candidate Starts for GrecoEtereo\_18:

(Start: 18 @13216 has 208 MA's), (Start: 22 @13240 has 1 MA's), (63, 13552), (78, 13627),

Gene: GreenWeasel\_13 Start: 8459, Stop: 8926, Start Num: 17

Candidate Starts for GreenWeasel\_13:

(Start: 17 @8459 has 105 MA's), (38, 8609), (39, 8612), (45, 8648), (56, 8735), (68, 8828), (73, 8846), (84, 8912),

Gene: Greg\_19 Start: 13225, Stop: 13674, Start Num: 18

Candidate Starts for Greg\_19:

(Start: 18 @13225 has 208 MA's), (Start: 22 @13249 has 1 MA's), (63, 13561), (78, 13636),

Gene: Gretchen\_8 Start: 8203, Stop: 8691, Start Num: 14

Candidate Starts for Gretchen\_8:

(Start: 14 @8203 has 82 MA's), (23, 8248), (50, 8473), (57, 8518), (71, 8611),

Gene: GroundGoblin\_18 Start: 13747, Stop: 14196, Start Num: 18

Candidate Starts for GroundGoblin\_18:

(Start: 18 @13747 has 208 MA's), (Start: 22 @13771 has 1 MA's), (63, 14083), (78, 14158),

Gene: Gumpizza\_8 Start: 7344, Stop: 7811, Start Num: 14

Candidate Starts for Gumpizza\_8:

(2, 7293), (Start: 14 @7344 has 82 MA's), (40, 7536), (50, 7617),

Gene: Gyzlar\_19 Start: 14152, Stop: 14601, Start Num: 18

Candidate Starts for Gyzlar\_19:

(Start: 18 @14152 has 208 MA's), (Start: 22 @14176 has 1 MA's), (63, 14488), (78, 14563),

Gene: Haizum\_11 Start: 8160, Stop: 8636, Start Num: 17

Candidate Starts for Haizum\_11:

(Start: 17 @8160 has 105 MA's), (39, 8322), (45, 8358),

Gene: Halsey\_8 Start: 7343, Stop: 7810, Start Num: 14

Candidate Starts for Halsey\_8:

(2, 7292), (Start: 14 @7343 has 82 MA's), (40, 7535), (50, 7616),

Gene: Hami1\_19 Start: 13297, Stop: 13746, Start Num: 18

Candidate Starts for Hami1\_19:

(Start: 18 @13297 has 208 MA's), (Start: 22 @13321 has 1 MA's), (63, 13633), (78, 13708),

Gene: HanShotFirst\_17 Start: 12831, Stop: 13280, Start Num: 18

Candidate Starts for HanShotFirst\_17:

(Start: 18 @12831 has 208 MA's), (Start: 22 @12855 has 1 MA's), (63, 13167), (78, 13242),

Gene: Hank144\_12 Start: 8436, Stop: 8966, Start Num: 5

Candidate Starts for Hank144\_12:

(Start: 5 @8436 has 1 MA's), (8, 8451), (Start: 17 @8499 has 105 MA's), (43, 8673), (45, 8697), (61, 8811),

Gene: HarryOW\_18 Start: 13216, Stop: 13665, Start Num: 18

Candidate Starts for HarryOW\_18:

(Start: 18 @13216 has 208 MA's), (Start: 22 @13240 has 1 MA's), (63, 13552), (78, 13627),

Gene: Hermia\_19 Start: 13963, Stop: 14388, Start Num: 22

Candidate Starts for Hermia\_19:

(Start: 18 @13939 has 208 MA's), (Start: 22 @13963 has 1 MA's), (63, 14275), (78, 14350),

Gene: HermioneGrange\_17 Start: 12851, Stop: 13300, Start Num: 18

Candidate Starts for HermioneGrange\_17:

(Start: 18 @12851 has 208 MA's), (Start: 22 @12875 has 1 MA's), (63, 13187), (78, 13262),

Gene: Hippo\_11 Start: 8364, Stop: 8813, Start Num: 17

Candidate Starts for Hippo\_11:

(Start: 17 @8364 has 105 MA's), (45, 8553), (76, 8757),

Gene: Homines\_17 Start: 12941, Stop: 13390, Start Num: 18

Candidate Starts for Homines\_17:

(Start: 18 @12941 has 208 MA's), (Start: 22 @12965 has 1 MA's), (63, 13277), (78, 13352),

Gene: Honk\_7 Start: 6227, Stop: 6709, Start Num: 15

Candidate Starts for Honk\_7:

(Start: 15 @6227 has 1 MA's), (36, 6386), (43, 6416), (65, 6587), (77, 6665),

Gene: Hope4ever\_17 Start: 13327, Stop: 13776, Start Num: 18

Candidate Starts for Hope4ever\_17:

(Start: 18 @13327 has 208 MA's), (Start: 22 @13351 has 1 MA's), (63, 13663), (78, 13738),

Gene: Hydra\_13 Start: 8923, Stop: 9375, Start Num: 17

Candidate Starts for Hydra\_13:

(10, 8884), (Start: 17 @8923 has 105 MA's), (45, 9115), (65, 9271),

Gene: IAmGroot\_8 Start: 7980, Stop: 8462, Start Num: 14

Candidate Starts for IAmGroot\_8:

(Start: 14 @7980 has 82 MA's), (23, 8031),

Gene: ILeeKay\_19 Start: 13086, Stop: 13535, Start Num: 18

Candidate Starts for ILeeKay\_19:

(Start: 18 @13086 has 208 MA's), (Start: 22 @13110 has 1 MA's), (63, 13422), (78, 13497),

Gene: IUFootball\_7 Start: 6336, Stop: 6731, Start Num: 14

Candidate Starts for IUFootball\_7:

(Start: 14 @6336 has 82 MA's), (42, 6528), (59, 6657),

Gene: Ichabod\_18 Start: 12943, Stop: 13392, Start Num: 18

Candidate Starts for Ichabod\_18:

(Start: 18 @12943 has 208 MA's), (Start: 22 @12967 has 1 MA's), (53, 13210), (63, 13279), (78, 13354),

Gene: IgnatiusPatJac\_16 Start: 12912, Stop: 13361, Start Num: 18

Candidate Starts for IgnatiusPatJac\_16:

(Start: 18 @12912 has 208 MA's), (Start: 22 @12936 has 1 MA's), (63, 13248), (78, 13323),

Gene: Indigo\_11 Start: 8395, Stop: 8847, Start Num: 17

Candidate Starts for Indigo\_11:

(10, 8356), (Start: 17 @8395 has 105 MA's), (45, 8587), (65, 8743),

Gene: Inyanga\_16 Start: 12689, Stop: 13138, Start Num: 18

Candidate Starts for Inyanga\_16:

(Start: 18 @12689 has 208 MA's), (Start: 22 @12713 has 1 MA's), (63, 13025), (78, 13100),

Gene: Iqorha\_16 Start: 12688, Stop: 13137, Start Num: 18

Candidate Starts for Iqorha\_16:

(Start: 18 @12688 has 208 MA's), (Start: 22 @12712 has 1 MA's), (63, 13024), (78, 13099),

Gene: Issmi\_12 Start: 8440, Stop: 8916, Start Num: 17

Candidate Starts for Issmi\_12:

(Start: 17 @8440 has 105 MA's), (45, 8638), (70, 8830), (84, 8902),

Gene: Iter\_8 Start: 7909, Stop: 8259, Start Num: 26

Candidate Starts for Iter\_8:

(Start: 14 @7852 has 82 MA's), (Start: 26 @7909 has 1 MA's), (42, 8044), (46, 8089),

Gene: IttyBittyPiggy\_8 Start: 7843, Stop: 8253, Start Num: 14

Candidate Starts for IttyBittyPiggy\_8:

(Start: 14 @7843 has 82 MA's), (42, 8035), (46, 8080),

Gene: Itza\_11 Start: 8587, Stop: 9072, Start Num: 17

Candidate Starts for Itza\_11:

(Start: 17 @8587 has 105 MA's), (39, 8740), (45, 8776), (56, 8863),

Gene: Izzy\_12 Start: 8605, Stop: 9057, Start Num: 17

Candidate Starts for Izzy\_12:

(10, 8566), (Start: 17 @8605 has 105 MA's), (45, 8797), (65, 8953),

Gene: JC27\_19 Start: 13822, Stop: 14271, Start Num: 18

Candidate Starts for JC27\_19:

(Start: 18 @13822 has 208 MA's), (Start: 22 @13846 has 1 MA's), (63, 14158), (78, 14233),

Gene: JackSparrow\_18 Start: 13253, Stop: 13702, Start Num: 18

Candidate Starts for JackSparrow\_18:

(Start: 18 @13253 has 208 MA's), (Start: 22 @13277 has 1 MA's), (63, 13589), (78, 13664),

Gene: Janeemi\_9 Start: 8938, Stop: 9369, Start Num: 14

Candidate Starts for Janeemi\_9:

(Start: 14 @8938 has 82 MA's), (42, 9130), (46, 9175),

Gene: Janus\_12 Start: 8547, Stop: 9035, Start Num: 17

Candidate Starts for Janus\_12:

(3, 8478), (Start: 17 @8547 has 105 MA's), (31, 8658), (35, 8688), (45, 8745), (61, 8859), (65, 8901), (66, 8907), (79, 8976),

Gene: Jash\_12 Start: 8558, Stop: 9010, Start Num: 17

Candidate Starts for Jash\_12:

(10, 8519), (Start: 17 @8558 has 105 MA's), (45, 8750), (65, 8906),

Gene: JasmineDragon\_7 Start: 6172, Stop: 6573, Start Num: 14

Candidate Starts for JasmineDragon\_7:

(Start: 14 @6172 has 82 MA's), (46, 6409),

Gene: Jasper\_18 Start: 12754, Stop: 13203, Start Num: 18

Candidate Starts for Jasper\_18:

(Start: 18 @12754 has 208 MA's), (Start: 22 @12778 has 1 MA's), (63, 13090), (78, 13165),

Gene: Jerm2\_18 Start: 13123, Stop: 13572, Start Num: 18

Candidate Starts for Jerm2\_18:

(Start: 18 @13123 has 208 MA's), (Start: 22 @13147 has 1 MA's), (63, 13459), (78, 13534),

Gene: Jevington\_13 Start: 8742, Stop: 9218, Start Num: 17

Candidate Starts for Jevington\_13:

(Start: 17 @8742 has 105 MA's), (33, 8862), (39, 8904), (56, 9027), (70, 9132), (76, 9147), (84, 9204),

Gene: Jhitchelle\_11 Start: 8093, Stop: 8554, Start Num: 17

Candidate Starts for Jhitchelle\_11:

(Start: 17 @8093 has 105 MA's), (21, 8108), (45, 8282), (65, 8438), (84, 8540),

Gene: Joemato\_8 Start: 7843, Stop: 8250, Start Num: 14

Candidate Starts for Joemato\_8:

(Start: 14 @7843 has 82 MA's), (42, 8035),

Gene: JohnDoe\_8 Start: 7841, Stop: 8248, Start Num: 14

Candidate Starts for JohnDoe\_8:

(Start: 14 @7841 has 82 MA's), (42, 8033),

Gene: JohnThicc\_7 Start: 6168, Stop: 6569, Start Num: 14

Candidate Starts for JohnThicc\_7:

(Start: 14 @6168 has 82 MA's), (42, 6360), (46, 6405),

Gene: Jorgensen\_17 Start: 12710, Stop: 13159, Start Num: 18

Candidate Starts for Jorgensen\_17:

(Start: 18 @12710 has 208 MA's), (Start: 22 @12734 has 1 MA's), (63, 13046), (78, 13121),

Gene: Jstan\_8 Start: 7827, Stop: 8234, Start Num: 14

Candidate Starts for Jstan\_8:

(Start: 14 @7827 has 82 MA's), (41, 8016), (42, 8019), (44, 8025), (46, 8064),

Gene: JuliaChild\_19 Start: 13381, Stop: 13830, Start Num: 18

Candidate Starts for JuliaChild\_19:

(Start: 18 @13381 has 208 MA's), (Start: 22 @13405 has 1 MA's), (63, 13717), (78, 13792),

Gene: JuneStar\_8 Start: 7957, Stop: 8352, Start Num: 14

Candidate Starts for JuneStar\_8:

(Start: 14 @7957 has 82 MA's), (46, 8194),

Gene: KBG\_18 Start: 13831, Stop: 14280, Start Num: 18

Candidate Starts for KBG\_18:

(Start: 18 @13831 has 208 MA's), (Start: 22 @13855 has 1 MA's), (63, 14167), (78, 14242),

Gene: KSSJEB\_17 Start: 12728, Stop: 13177, Start Num: 18

Candidate Starts for KSSJEB\_17:

(Start: 18 @12728 has 208 MA's), (Start: 22 @12752 has 1 MA's), (63, 13064), (78, 13139),

Gene: Kaine\_11 Start: 8157, Stop: 8618, Start Num: 17

Candidate Starts for Kaine\_11:

(Start: 17 @8157 has 105 MA's), (21, 8172), (45, 8346), (65, 8502), (84, 8604),

Gene: Kalimba\_8 Start: 7252, Stop: 7719, Start Num: 14

Candidate Starts for Kalimba\_8:

(2, 7201), (Start: 14 @7252 has 82 MA's), (40, 7444), (50, 7525), (58, 7576),

Gene: Kanely\_18 Start: 13490, Stop: 13939, Start Num: 18

Candidate Starts for Kanely\_18:

(Start: 18 @13490 has 208 MA's), (Start: 22 @13514 has 1 MA's), (63, 13826), (78, 13901),

Gene: Katalie\_12 Start: 8637, Stop: 9086, Start Num: 17

Candidate Starts for Katalie\_12:

(Start: 6 @8580 has 1 MA's), (Start: 17 @8637 has 105 MA's), (45, 8826),

Gene: Kaylissa\_8 Start: 7844, Stop: 8251, Start Num: 14

Candidate Starts for Kaylissa\_8:

(Start: 14 @7844 has 82 MA's), (42, 8036),

Gene: KeAlii\_8 Start: 7870, Stop: 8277, Start Num: 14

Candidate Starts for KeAlii\_8:

(Start: 14 @7870 has 82 MA's), (Start: 26 @7927 has 1 MA's),

Gene: Kenmech\_20 Start: 14292, Stop: 14741, Start Num: 18

Candidate Starts for Kenmech\_20:

(Start: 18 @14292 has 208 MA's), (Start: 22 @14316 has 1 MA's), (63, 14628), (78, 14703),

Gene: KikiBouba\_18 Start: 13748, Stop: 14197, Start Num: 18

Candidate Starts for KikiBouba\_18:

(Start: 18 @13748 has 208 MA's), (Start: 22 @13772 has 1 MA's), (63, 14084), (78, 14159),

Gene: Killigrew\_15 Start: 12364, Stop: 12813, Start Num: 18

Candidate Starts for Killigrew\_15:

(Start: 18 @12364 has 208 MA's), (Start: 22 @12388 has 1 MA's), (63, 12700), (78, 12775),

Gene: KyMonks1A\_19 Start: 13229, Stop: 13678, Start Num: 18

Candidate Starts for KyMonks1A\_19:

(Start: 18 @13229 has 208 MA's), (Start: 22 @13253 has 1 MA's), (63, 13565), (78, 13640),

Gene: LadyAstra\_7 Start: 6168, Stop: 6569, Start Num: 14

Candidate Starts for LadyAstra\_7:

(Start: 14 @6168 has 82 MA's), (42, 6360), (46, 6405),

Gene: Lamina13\_17 Start: 12505, Stop: 12954, Start Num: 18

Candidate Starts for Lamina13\_17:

(Start: 18 @12505 has 208 MA's), (Start: 22 @12529 has 1 MA's), (63, 12841), (78, 12916),

Gene: Lannister\_12 Start: 8385, Stop: 8834, Start Num: 17

Candidate Starts for Lannister\_12:

(Start: 17 @8385 has 105 MA's), (45, 8574),

Gene: Legacy\_11 Start: 8366, Stop: 8818, Start Num: 17

Candidate Starts for Legacy\_11:

(10, 8327), (Start: 17 @8366 has 105 MA's), (45, 8558), (65, 8714),

Gene: Lego\_8 Start: 7842, Stop: 8249, Start Num: 14

Candidate Starts for Lego\_8:

(Start: 14 @7842 has 82 MA's), (42, 8034),

Gene: Lesedi\_16 Start: 12666, Stop: 13115, Start Num: 18

Candidate Starts for Lesedi\_16:

(Start: 18 @12666 has 208 MA's), (Start: 22 @12690 has 1 MA's), (63, 13002), (78, 13077),

Gene: Levia\_17 Start: 13692, Stop: 14141, Start Num: 18

Candidate Starts for Levia\_17:

(Start: 18 @13692 has 208 MA's), (Start: 22 @13716 has 1 MA's), (63, 14028), (78, 14103),

Gene: Leviticus\_11 Start: 8395, Stop: 8847, Start Num: 17

Candidate Starts for Leviticus\_11:

(10, 8356), (Start: 17 @8395 has 105 MA's), (45, 8587), (65, 8743),

Gene: Licorice\_19 Start: 13818, Stop: 14267, Start Num: 18

Candidate Starts for Licorice\_19:

(Start: 18 @13818 has 208 MA's), (Start: 22 @13842 has 1 MA's), (63, 14154), (78, 14229),

Gene: Liebe\_7 Start: 6336, Stop: 6731, Start Num: 14

Candidate Starts for Liebe\_7:

(Start: 14 @6336 has 82 MA's), (42, 6528), (59, 6657),

Gene: Lika\_11 Start: 8383, Stop: 8832, Start Num: 17

Candidate Starts for Lika\_11:

(Start: 17 @8383 has 105 MA's), (45, 8572), (65, 8728),

Gene: LilBib\_18 Start: 13748, Stop: 14197, Start Num: 18

Candidate Starts for LilBib\_18:

(Start: 18 @13748 has 208 MA's), (Start: 22 @13772 has 1 MA's), (63, 14084), (78, 14159),

Gene: Lizalica\_8 Start: 7834, Stop: 8241, Start Num: 14

Candidate Starts for Lizalica\_8:

(Start: 14 @7834 has 82 MA's), (42, 8026), (46, 8071),

Gene: Lockley\_17 Start: 12843, Stop: 13292, Start Num: 18

Candidate Starts for Lockley\_17:

(Start: 18 @12843 has 208 MA's), (Start: 22 @12867 has 1 MA's), (63, 13179), (78, 13254),

Gene: London\_8 Start: 7827, Stop: 8234, Start Num: 14

Candidate Starts for London\_8:

(Start: 14 @7827 has 82 MA's), (41, 8016), (42, 8019), (44, 8025), (46, 8064),

Gene: Loofah\_12 Start: 8254, Stop: 8751, Start Num: 17

Candidate Starts for Loofah\_12:

(Start: 17 @8254 has 105 MA's), (42, 8425), (45, 8452), (61, 8566), (65, 8608), (66, 8614), (84, 8737),

Gene: Lopton\_18 Start: 14267, Stop: 14716, Start Num: 18

Candidate Starts for Lopton\_18:

(Start: 18 @14267 has 208 MA's), (Start: 22 @14291 has 1 MA's), (78, 14678),

Gene: Lorelei\_11 Start: 8361, Stop: 8804, Start Num: 17

Candidate Starts for Lorelei\_11:

(Start: 6 @8304 has 1 MA's), (Start: 17 @8361 has 105 MA's), (45, 8544), (76, 8748),

Gene: LunarLander\_17 Start: 12622, Stop: 13071, Start Num: 18

Candidate Starts for LunarLander\_17:

(Start: 18 @12622 has 208 MA's), (63, 12958), (78, 13033),

Gene: MPlant7149\_16 Start: 12477, Stop: 12926, Start Num: 18

Candidate Starts for MPlant7149\_16:

(Start: 18 @12477 has 208 MA's), (Start: 22 @12501 has 1 MA's), (63, 12813), (78, 12888),

Gene: MaGuCo\_7 Start: 6195, Stop: 6590, Start Num: 14

Candidate Starts for MaGuCo\_7:

(Start: 14 @6195 has 82 MA's), (42, 6387), (59, 6516),

Gene: Mabodamaca\_8 Start: 7413, Stop: 7892, Start Num: 14

Candidate Starts for Mabodamaca\_8:

(Start: 14 @7413 has 82 MA's), (51, 7689), (80, 7884),

Gene: Magnar\_17 Start: 12624, Stop: 13073, Start Num: 18

Candidate Starts for Magnar\_17:

(Start: 18 @12624 has 208 MA's), (Start: 22 @12648 has 1 MA's), (63, 12960), (78, 13035),

Gene: Magnito\_16 Start: 12388, Stop: 12837, Start Num: 18

Candidate Starts for Magnito\_16:

(Start: 18 @12388 has 208 MA's), (Start: 22 @12412 has 1 MA's), (63, 12724), (78, 12799),

Gene: Makemake\_17 Start: 14117, Stop: 14566, Start Num: 18

Candidate Starts for Makemake\_17:

(Start: 18 @14117 has 208 MA's), (Start: 22 @14141 has 1 MA's), (63, 14453), (78, 14528),

Gene: Manatee\_18 Start: 13139, Stop: 13588, Start Num: 18

Candidate Starts for Manatee\_18:

(Start: 18 @13139 has 208 MA's), (Start: 22 @13163 has 1 MA's), (63, 13475), (78, 13550),

Gene: Maneekul\_11 Start: 8366, Stop: 8815, Start Num: 17

Candidate Starts for Maneekul\_11:

(Start: 6 @8309 has 1 MA's), (Start: 17 @8366 has 105 MA's), (45, 8555), (76, 8759),

Gene: Marav\_14 Start: 9092, Stop: 9568, Start Num: 17

Candidate Starts for Marav\_14:

(Start: 17 @9092 has 105 MA's), (33, 9212), (39, 9254), (45, 9290), (70, 9482), (84, 9554),

Gene: Marcell\_17 Start: 13137, Stop: 13586, Start Num: 18

Candidate Starts for Marcell\_17:

(Start: 18 @13137 has 208 MA's), (Start: 22 @13161 has 1 MA's), (63, 13473), (78, 13548),

Gene: Marchy\_16 Start: 12467, Stop: 12916, Start Num: 18

Candidate Starts for Marchy\_16:

(Start: 18 @12467 has 208 MA's), (Start: 22 @12491 has 1 MA's), (63, 12803), (78, 12878),

Gene: Marco3\_17 Start: 13112, Stop: 13561, Start Num: 18

Candidate Starts for Marco3\_17:

(Start: 18 @13112 has 208 MA's), (Start: 22 @13136 has 1 MA's), (63, 13448), (78, 13523),

Gene: Marge\_18 Start: 13363, Stop: 13812, Start Num: 18

Candidate Starts for Marge\_18:

(Start: 18 @13363 has 208 MA's), (Start: 22 @13387 has 1 MA's), (63, 13699), (78, 13774),

Gene: Maroc7\_16 Start: 12649, Stop: 13098, Start Num: 18

Candidate Starts for Maroc7\_16:

(Start: 18 @12649 has 208 MA's), (Start: 22 @12673 has 1 MA's), (63, 12985), (78, 13060),

Gene: Marsha\_17 Start: 13405, Stop: 13854, Start Num: 18

Candidate Starts for Marsha\_17:

(Start: 18 @13405 has 208 MA's), (Start: 22 @13429 has 1 MA's), (63, 13741), (78, 13816),

Gene: MaryBeth\_17 Start: 13071, Stop: 13520, Start Num: 18

Candidate Starts for MaryBeth\_17:

(Start: 18 @13071 has 208 MA's), (Start: 22 @13095 has 1 MA's), (63, 13407), (78, 13482),

Gene: Maureen\_7 Start: 6336, Stop: 6731, Start Num: 14

Candidate Starts for Maureen\_7:

(Start: 14 @6336 has 82 MA's), (42, 6528), (59, 6657),

Gene: McGuire\_18 Start: 12958, Stop: 13407, Start Num: 18

Candidate Starts for McGuire\_18:

(Start: 18 @12958 has 208 MA's), (Start: 22 @12982 has 1 MA's), (63, 13294), (78, 13369),

Gene: McSinger\_18 Start: 13332, Stop: 13781, Start Num: 18

Candidate Starts for McSinger\_18:

(Start: 18 @13332 has 208 MA's), (Start: 22 @13356 has 1 MA's), (63, 13668), (78, 13743),

Gene: MetalQZJ\_17 Start: 13071, Stop: 13520, Start Num: 18

Candidate Starts for MetalQZJ\_17:

(Start: 18 @13071 has 208 MA's), (Start: 22 @13095 has 1 MA's), (63, 13407), (78, 13482),

Gene: Michley\_17 Start: 12818, Stop: 13267, Start Num: 18

Candidate Starts for Michley\_17:

(Start: 18 @12818 has 208 MA's), (Start: 22 @12842 has 1 MA's), (63, 13154), (78, 13229),

Gene: MilleFeuille\_14 Start: 12395, Stop: 12844, Start Num: 18

Candidate Starts for MilleFeuille\_14:

(Start: 18 @12395 has 208 MA's), (Start: 22 @12419 has 1 MA's), (63, 12731), (78, 12806),

Gene: MiniMommy\_7 Start: 6172, Stop: 6573, Start Num: 14

Candidate Starts for MiniMommy\_7:

(Start: 14 @6172 has 82 MA's), (46, 6409),

Gene: MissSwiss\_8 Start: 7857, Stop: 8261, Start Num: 14

Candidate Starts for MissSwiss\_8:

(Start: 14 @7857 has 82 MA's), (32, 7992), (38, 8037), (42, 8049),

Gene: Mkhuseleli\_18 Start: 12972, Stop: 13421, Start Num: 18

Candidate Starts for Mkhuseleli\_18:

(Start: 18 @12972 has 208 MA's), (Start: 22 @12996 has 1 MA's), (63, 13308), (78, 13383),

Gene: Molly\_18 Start: 12679, Stop: 13128, Start Num: 18

Candidate Starts for Molly\_18:

(Start: 18 @12679 has 208 MA's), (Start: 22 @12703 has 1 MA's), (63, 13015), (78, 13090),

Gene: Monet\_19 Start: 14174, Stop: 14623, Start Num: 18

Candidate Starts for Monet\_19:

(Start: 18 @14174 has 208 MA's), (Start: 22 @14198 has 1 MA's), (63, 14510), (78, 14585),

Gene: Moose\_16 Start: 12915, Stop: 13364, Start Num: 18

Candidate Starts for Moose\_16:

(Start: 18 @12915 has 208 MA's), (Start: 22 @12939 has 1 MA's), (63, 13251), (78, 13326),

Gene: Moss\_8 Start: 7343, Stop: 7810, Start Num: 14

Candidate Starts for Moss\_8:

(2, 7292), (Start: 14 @7343 has 82 MA's), (40, 7535), (50, 7616),

Gene: MrGordo\_17 Start: 12631, Stop: 13080, Start Num: 18

Candidate Starts for MrGordo\_17:

(Start: 18 @12631 has 208 MA's), (Start: 22 @12655 has 1 MA's), (63, 12967), (78, 13042),

Gene: Mryolo\_16 Start: 12665, Stop: 13114, Start Num: 18

Candidate Starts for Mryolo\_16:

(Start: 18 @12665 has 208 MA's), (Start: 22 @12689 has 1 MA's), (63, 13001), (78, 13076),

Gene: Mudpuppy\_8 Start: 7842, Stop: 8249, Start Num: 14

Candidate Starts for Mudpuppy\_8:

(Start: 14 @7842 has 82 MA's), (42, 8034),

Gene: Mule\_17 Start: 12953, Stop: 13402, Start Num: 18

Candidate Starts for Mule\_17:

(Start: 18 @12953 has 208 MA's), (Start: 22 @12977 has 1 MA's), (63, 13289), (78, 13364),

Gene: Museum\_19 Start: 12972, Stop: 13421, Start Num: 18

Candidate Starts for Museum\_19:

(Start: 18 @12972 has 208 MA's), (Start: 22 @12996 has 1 MA's), (63, 13308), (78, 13383),

Gene: Mysterium\_8 Start: 7344, Stop: 7811, Start Num: 14

Candidate Starts for Mysterium\_8:

(2, 7293), (Start: 14 @7344 has 82 MA's), (40, 7536), (50, 7617),

Gene: NEHalo\_17 Start: 12701, Stop: 13150, Start Num: 18

Candidate Starts for NEHalo\_17:

(Start: 18 @12701 has 208 MA's), (Start: 22 @12725 has 1 MA's), (63, 13037), (78, 13112),

Gene: Nabi\_11 Start: 8361, Stop: 8804, Start Num: 17

Candidate Starts for Nabi\_11:

(Start: 6 @8304 has 1 MA's), (Start: 17 @8361 has 105 MA's), (45, 8544), (76, 8748),

Gene: Naira\_18 Start: 14453, Stop: 14902, Start Num: 18

Candidate Starts for Naira\_18:

(Start: 18 @14453 has 208 MA's), (Start: 22 @14477 has 1 MA's), (63, 14789), (78, 14864),

Gene: Nanodon\_13 Start: 8557, Stop: 9006, Start Num: 17

Candidate Starts for Nanodon\_13:

(Start: 17 @8557 has 105 MA's), (45, 8746),

Gene: Nerdos\_11 Start: 8395, Stop: 8847, Start Num: 17

Candidate Starts for Nerdos\_11:

(10, 8356), (Start: 17 @8395 has 105 MA's), (45, 8587), (65, 8743),

Gene: Nerujay\_18 Start: 13377, Stop: 13826, Start Num: 18

Candidate Starts for Nerujay\_18:

(Start: 18 @13377 has 208 MA's), (Start: 22 @13401 has 1 MA's), (63, 13713), (78, 13788),

Gene: Nhonho\_17 Start: 13130, Stop: 13579, Start Num: 18

Candidate Starts for Nhonho\_17:

(Start: 18 @13130 has 208 MA's), (Start: 22 @13154 has 1 MA's), (63, 13466), (78, 13541),

Gene: Niobe\_8 Start: 7827, Stop: 8234, Start Num: 14

Candidate Starts for Niobe\_8:

(Start: 14 @7827 has 82 MA's), (41, 8016), (42, 8019), (44, 8025), (46, 8064),

Gene: Nishikigoi\_11 Start: 8160, Stop: 8636, Start Num: 17

Candidate Starts for Nishikigoi\_11:

(Start: 17 @8160 has 105 MA's), (39, 8322), (45, 8358),

Gene: Nitro\_8 Start: 7844, Stop: 8251, Start Num: 14

Candidate Starts for Nitro\_8:

(Start: 14 @7844 has 82 MA's), (42, 8036), (46, 8081),

Gene: Niza\_19 Start: 13988, Stop: 14437, Start Num: 18

Candidate Starts for Niza\_19:

(Start: 18 @13988 has 208 MA's), (Start: 22 @14012 has 1 MA's), (63, 14324), (78, 14399),

Gene: Norz\_19 Start: 13624, Stop: 14073, Start Num: 18

Candidate Starts for Norz\_19:

(Start: 18 @13624 has 208 MA's), (Start: 22 @13648 has 1 MA's), (78, 14035),

Gene: Noxious\_18 Start: 13939, Stop: 14388, Start Num: 18

Candidate Starts for Noxious\_18:

(Start: 18 @13939 has 208 MA's), (Start: 22 @13963 has 1 MA's), (63, 14275), (78, 14350),

Gene: ObiToo\_8 Start: 8041, Stop: 8436, Start Num: 14

Candidate Starts for ObiToo\_8:

(Start: 14 @8041 has 82 MA's), (38, 8221), (42, 8233), (46, 8278),

Gene: Ohno789\_17 Start: 12771, Stop: 13220, Start Num: 18

Candidate Starts for Ohno789\_17:

(Start: 18 @12771 has 208 MA's), (Start: 22 @12795 has 1 MA's), (63, 13107), (78, 13182),

Gene: Oliynyk\_12 Start: 8558, Stop: 9010, Start Num: 17

Candidate Starts for Oliynyk\_12:

(10, 8519), (Start: 17 @8558 has 105 MA's), (45, 8750), (65, 8906),

Gene: Omar\_12 Start: 8382, Stop: 8870, Start Num: 17

Candidate Starts for Omar\_12:

(Start: 17 @8382 has 105 MA's), (39, 8544), (45, 8580), (56, 8667), (66, 8742), (79, 8811),

Gene: Oogway\_16 Start: 12883, Stop: 13332, Start Num: 18

Candidate Starts for Oogway\_16:

(Start: 18 @12883 has 208 MA's), (63, 13219), (78, 13294),

Gene: Origami\_7 Start: 6168, Stop: 6569, Start Num: 14

Candidate Starts for Origami\_7:

(Start: 14 @6168 has 82 MA's), (42, 6360), (46, 6405),

Gene: Ozzie\_11 Start: 8375, Stop: 8827, Start Num: 17

Candidate Starts for Ozzie\_11:

(10, 8336), (Start: 17 @8375 has 105 MA's), (45, 8567), (65, 8723),

Gene: OzzyJ\_12 Start: 8358, Stop: 8807, Start Num: 17

Candidate Starts for OzzyJ\_12:

(Start: 6 @8301 has 1 MA's), (Start: 17 @8358 has 105 MA's), (45, 8547), (76, 8751),

Gene: PSullivan\_19 Start: 13381, Stop: 13830, Start Num: 18

Candidate Starts for PSullivan\_19:

(Start: 18 @13381 has 208 MA's), (Start: 22 @13405 has 1 MA's), (63, 13717), (78, 13792),

Gene: Pablito\_11 Start: 8226, Stop: 8696, Start Num: 17

Candidate Starts for Pablito\_11:

(Start: 5 @8163 has 1 MA's), (8, 8178), (Start: 17 @8226 has 105 MA's), (45, 8424), (56, 8511), (61, 8538), (66, 8586),

Gene: PacerPaul\_17 Start: 13148, Stop: 13597, Start Num: 18

Candidate Starts for PacerPaul\_17:

(Start: 18 @13148 has 208 MA's), (63, 13484), (78, 13559),

Gene: Paedore\_11 Start: 8254, Stop: 8751, Start Num: 17

Candidate Starts for Paedore\_11:

(Start: 17 @8254 has 105 MA's), (42, 8425), (45, 8452), (61, 8566), (65, 8608), (66, 8614), (84, 8737),

Gene: Paolo\_13 Start: 8769, Stop: 9245, Start Num: 17

Candidate Starts for Paolo\_13:

(Start: 5 @8706 has 1 MA's), (8, 8721), (Start: 17 @8769 has 105 MA's), (33, 8889), (45, 8967), (70, 9159), (84, 9231),

Gene: Papez\_19 Start: 14600, Stop: 15049, Start Num: 18

Candidate Starts for Papez\_19:

(Start: 18 @14600 has 208 MA's), (Start: 22 @14624 has 1 MA's), (63, 14936), (78, 15011),

Gene: Paphu\_16 Start: 12337, Stop: 12786, Start Num: 18

Candidate Starts for Paphu\_16:

(Start: 18 @12337 has 208 MA's), (Start: 22 @12361 has 1 MA's), (63, 12673), (78, 12748),

Gene: Paraselene\_16 Start: 12653, Stop: 13102, Start Num: 18

Candidate Starts for Paraselene\_16:

(Start: 18 @12653 has 208 MA's), (Start: 22 @12677 has 1 MA's), (63, 12989), (78, 13064),

Gene: Pari\_18 Start: 13128, Stop: 13577, Start Num: 18

Candidate Starts for Pari\_18:

(Start: 18 @13128 has 208 MA's), (Start: 22 @13152 has 1 MA's), (63, 13464), (78, 13539),

Gene: Parliament\_16 Start: 13017, Stop: 13466, Start Num: 18

Candidate Starts for Parliament\_16:

(Start: 18 @13017 has 208 MA's), (Start: 22 @13041 has 1 MA's), (63, 13353), (78, 13428),

Gene: PascalRango\_16 Start: 12572, Stop: 13021, Start Num: 18

Candidate Starts for PascalRango\_16:

(Start: 18 @12572 has 208 MA's), (63, 12908), (78, 12983),

Gene: PattyP\_19 Start: 13181, Stop: 13630, Start Num: 18

Candidate Starts for PattyP\_19:

(Start: 18 @13181 has 208 MA's), (Start: 22 @13205 has 1 MA's), (63, 13517), (78, 13592),

Gene: Pavo\_12 Start: 8437, Stop: 8898, Start Num: 17

Candidate Starts for Pavo\_12:

(Start: 17 @8437 has 105 MA's), (21, 8452), (45, 8626), (65, 8782), (84, 8884),

Gene: Payneful\_17 Start: 12467, Stop: 12916, Start Num: 18

Candidate Starts for Payneful\_17:

(Start: 18 @12467 has 208 MA's), (Start: 22 @12491 has 1 MA's), (63, 12803), (78, 12878),

Gene: Pelly\_18 Start: 13417, Stop: 13866, Start Num: 18

Candidate Starts for Pelly\_18:

(Start: 18 @13417 has 208 MA's), (Start: 22 @13441 has 1 MA's), (63, 13753), (78, 13828),

Gene: Pepe\_18 Start: 13372, Stop: 13821, Start Num: 18

Candidate Starts for Pepe\_18:

(Start: 18 @13372 has 208 MA's), (Start: 22 @13396 has 1 MA's), (63, 13708), (78, 13783),

Gene: Percival\_8 Start: 8037, Stop: 8525, Start Num: 14

Candidate Starts for Percival\_8:

(Start: 14 @8037 has 82 MA's), (23, 8082), (42, 8232), (50, 8307), (57, 8352), (71, 8445),

Gene: Perseus\_18 Start: 13036, Stop: 13485, Start Num: 18

Candidate Starts for Perseus\_18:

(Start: 18 @13036 has 208 MA's), (Start: 22 @13060 has 1 MA's), (63, 13372), (78, 13447),

Gene: Peterson\_20 Start: 14627, Stop: 15076, Start Num: 18

Candidate Starts for Peterson\_20:

(Start: 18 @14627 has 208 MA's), (Start: 22 @14651 has 1 MA's), (63, 14963), (78, 15038),

Gene: Petp2012\_19 Start: 13849, Stop: 14298, Start Num: 18  
Candidate Starts for Petp2012\_19:  
(Start: 18 @13849 has 208 MA's), (Start: 22 @13873 has 1 MA's), (63, 14185), (78, 14260),

Gene: Petruchio\_17 Start: 12878, Stop: 13327, Start Num: 18  
Candidate Starts for Petruchio\_17:  
(Start: 18 @12878 has 208 MA's), (Start: 22 @12902 has 1 MA's), (63, 13214), (78, 13289),

Gene: PherrisBueller\_18 Start: 12801, Stop: 13250, Start Num: 18  
Candidate Starts for PherrisBueller\_18:  
(Start: 18 @12801 has 208 MA's), (Start: 22 @12825 has 1 MA's), (78, 13212),

Gene: Phettuccine\_11 Start: 8395, Stop: 8847, Start Num: 17  
Candidate Starts for Phettuccine\_11:  
(10, 8356), (Start: 17 @8395 has 105 MA's), (45, 8587), (65, 8743),

Gene: PhineBark\_16 Start: 13692, Stop: 14141, Start Num: 18  
Candidate Starts for PhineBark\_16:  
(Start: 18 @13692 has 208 MA's), (Start: 22 @13716 has 1 MA's), (63, 14028), (78, 14103),

Gene: Phives\_9 Start: 8933, Stop: 9340, Start Num: 14  
Candidate Starts for Phives\_9:  
(Start: 14 @8933 has 82 MA's), (32, 9068), (42, 9125), (46, 9170),

Gene: Phlippers\_16 Start: 13872, Stop: 14321, Start Num: 18  
Candidate Starts for Phlippers\_16:  
(Start: 18 @13872 has 208 MA's), (Start: 22 @13896 has 1 MA's), (63, 14208), (78, 14283),

Gene: PhrostyMug\_17 Start: 12950, Stop: 13399, Start Num: 18  
Candidate Starts for PhrostyMug\_17:  
(Start: 18 @12950 has 208 MA's), (Start: 22 @12974 has 1 MA's), (63, 13286), (78, 13361),

Gene: PinkPlastic\_16 Start: 12715, Stop: 13164, Start Num: 18  
Candidate Starts for PinkPlastic\_16:  
(Start: 18 @12715 has 208 MA's), (Start: 22 @12739 has 1 MA's), (63, 13051), (78, 13126),

Gene: Pinto\_19 Start: 13032, Stop: 13481, Start Num: 18  
Candidate Starts for Pinto\_19:  
(Start: 18 @13032 has 208 MA's), (Start: 22 @13056 has 1 MA's), (63, 13368), (78, 13443),

Gene: Pippin\_19 Start: 13284, Stop: 13733, Start Num: 18  
Candidate Starts for Pippin\_19:  
(Start: 18 @13284 has 208 MA's), (63, 13620), (78, 13695),

Gene: Pita2\_19 Start: 13381, Stop: 13830, Start Num: 18  
Candidate Starts for Pita2\_19:  
(Start: 18 @13381 has 208 MA's), (Start: 22 @13405 has 1 MA's), (63, 13717), (78, 13792),

Gene: Pixelle\_8 Start: 7876, Stop: 8283, Start Num: 14  
Candidate Starts for Pixelle\_8:  
(Start: 14 @7876 has 82 MA's), (32, 8011), (42, 8068), (46, 8113),

Gene: PowerRanger\_17 Start: 13508, Stop: 13957, Start Num: 18

Candidate Starts for PowerRanger\_17:

(Start: 18 @13508 has 208 MA's), (Start: 22 @13532 has 1 MA's), (63, 13844), (78, 13919),

Gene: Powerpuff\_8 Start: 7893, Stop: 8300, Start Num: 14

Candidate Starts for Powerpuff\_8:

(Start: 14 @7893 has 82 MA's), (42, 8085),

Gene: ProMouse\_16 Start: 13357, Stop: 13806, Start Num: 18

Candidate Starts for ProMouse\_16:

(Start: 18 @13357 has 208 MA's), (Start: 22 @13381 has 1 MA's), (63, 13693), (78, 13768),

Gene: Provolone\_12 Start: 8167, Stop: 8628, Start Num: 17

Candidate Starts for Provolone\_12:

(Start: 17 @8167 has 105 MA's), (21, 8182), (45, 8356), (65, 8512), (84, 8614),

Gene: Puginator\_13 Start: 8715, Stop: 9191, Start Num: 17

Candidate Starts for Puginator\_13:

(Start: 17 @8715 has 105 MA's), (33, 8835), (45, 8913), (84, 9177),

Gene: Pumpkins\_8 Start: 7958, Stop: 8353, Start Num: 14

Candidate Starts for Pumpkins\_8:

(Start: 14 @7958 has 82 MA's), (42, 8150), (46, 8195),

Gene: Puppet\_17 Start: 12954, Stop: 13403, Start Num: 18

Candidate Starts for Puppet\_17:

(Start: 18 @12954 has 208 MA's), (63, 13290), (78, 13365),

Gene: QTRLifeCrisis\_17 Start: 13358, Stop: 13807, Start Num: 18

Candidate Starts for QTRLifeCrisis\_17:

(Start: 18 @13358 has 208 MA's), (Start: 22 @13382 has 1 MA's), (63, 13694), (78, 13769),

Gene: R4\_11 Start: 8225, Stop: 8722, Start Num: 17

Candidate Starts for R4\_11:

(Start: 17 @8225 has 105 MA's), (42, 8396), (45, 8423), (61, 8537), (65, 8579), (66, 8585), (84, 8708),

Gene: Raid\_18 Start: 12642, Stop: 13091, Start Num: 18

Candidate Starts for Raid\_18:

(Start: 18 @12642 has 208 MA's), (Start: 22 @12666 has 1 MA's), (63, 12978), (78, 13053),

Gene: Rajelicia\_17 Start: 13166, Stop: 13615, Start Num: 18

Candidate Starts for Rajelicia\_17:

(Start: 18 @13166 has 208 MA's), (Start: 22 @13190 has 1 MA's), (63, 13502), (78, 13577),

Gene: Rana\_11 Start: 8361, Stop: 8804, Start Num: 17

Candidate Starts for Rana\_11:

(Start: 6 @8304 has 1 MA's), (Start: 17 @8361 has 105 MA's), (45, 8544), (76, 8748),

Gene: RedBear\_13 Start: 8637, Stop: 9086, Start Num: 17

Candidate Starts for RedBear\_13:

(Start: 6 @8580 has 1 MA's), (Start: 17 @8637 has 105 MA's), (45, 8826),

Gene: Reedo\_8 Start: 7890, Stop: 8297, Start Num: 14

Candidate Starts for Reedo\_8:

(Start: 14 @7890 has 82 MA's), (38, 8070),

Gene: Rhynn\_17 Start: 12959, Stop: 13408, Start Num: 18

Candidate Starts for Rhynn\_17:

(Start: 18 @12959 has 208 MA's), (Start: 22 @12983 has 1 MA's), (63, 13295), (78, 13370),

Gene: RidgeCB\_17 Start: 12733, Stop: 13182, Start Num: 18

Candidate Starts for RidgeCB\_17:

(Start: 18 @12733 has 208 MA's), (Start: 22 @12757 has 1 MA's), (63, 13069), (78, 13144),

Gene: Ringer\_17 Start: 13217, Stop: 13666, Start Num: 18

Candidate Starts for Ringer\_17:

(Start: 18 @13217 has 208 MA's), (Start: 22 @13241 has 1 MA's), (63, 13553), (78, 13628),

Gene: RockScotty\_8 Start: 7343, Stop: 7810, Start Num: 14

Candidate Starts for RockScotty\_8:

(2, 7292), (Start: 14 @7343 has 82 MA's), (40, 7535), (50, 7616),

Gene: Rohr\_18 Start: 13156, Stop: 13605, Start Num: 18

Candidate Starts for Rohr\_18:

(Start: 18 @13156 has 208 MA's), (Start: 22 @13180 has 1 MA's), (63, 13492), (78, 13567),

Gene: Rubeus\_18 Start: 12991, Stop: 13440, Start Num: 18

Candidate Starts for Rubeus\_18:

(Start: 18 @12991 has 208 MA's), (Start: 22 @13015 has 1 MA's), (63, 13327), (78, 13402),

Gene: Rufus\_18 Start: 13324, Stop: 13773, Start Num: 18

Candidate Starts for Rufus\_18:

(Start: 18 @13324 has 208 MA's), (Start: 22 @13348 has 1 MA's), (63, 13660), (78, 13735),

Gene: Rusticus\_12 Start: 8558, Stop: 9010, Start Num: 17

Candidate Starts for Rusticus\_12:

(10, 8519), (Start: 17 @8558 has 105 MA's), (45, 8750), (65, 8906),

Gene: Rutherferd\_19 Start: 13504, Stop: 13953, Start Num: 18

Candidate Starts for Rutherferd\_19:

(Start: 18 @13504 has 208 MA's), (Start: 22 @13528 has 1 MA's), (63, 13840), (78, 13915),

Gene: STLscum\_18 Start: 13367, Stop: 13816, Start Num: 18

Candidate Starts for STLscum\_18:

(Start: 18 @13367 has 208 MA's), (Start: 22 @13391 has 1 MA's), (63, 13703), (78, 13778),

Gene: Sabourin\_8 Start: 7252, Stop: 7719, Start Num: 14

Candidate Starts for Sabourin\_8:

(2, 7201), (Start: 14 @7252 has 82 MA's), (40, 7444), (50, 7525), (58, 7576),

Gene: Saftant\_11 Start: 8442, Stop: 8903, Start Num: 17

Candidate Starts for Saftant\_11:

(Start: 17 @8442 has 105 MA's), (45, 8631), (65, 8787), (83, 8874), (84, 8889),

Gene: Sagefire\_18 Start: 13764, Stop: 14213, Start Num: 18

Candidate Starts for Sagefire\_18:

(Start: 18 @13764 has 208 MA's), (Start: 22 @13788 has 1 MA's), (63, 14100), (78, 14175),

Gene: Sandaddy\_16 Start: 12879, Stop: 13328, Start Num: 18

Candidate Starts for Sandaddy\_16:

(Start: 18 @12879 has 208 MA's), (Start: 22 @12903 has 1 MA's), (63, 13215), (78, 13290),

Gene: Sanya\_16 Start: 13541, Stop: 13990, Start Num: 18

Candidate Starts for Sanya\_16:

(Start: 18 @13541 has 208 MA's), (Start: 22 @13565 has 1 MA's), (63, 13877), (78, 13952),

Gene: SarFire\_17 Start: 13033, Stop: 13482, Start Num: 18

Candidate Starts for SarFire\_17:

(Start: 18 @13033 has 208 MA's), (Start: 22 @13057 has 1 MA's), (63, 13369), (78, 13444),

Gene: SarahRose\_11 Start: 8364, Stop: 8813, Start Num: 17

Candidate Starts for SarahRose\_11:

(Start: 17 @8364 has 105 MA's), (45, 8553), (76, 8757),

Gene: Schaffner\_8 Start: 7952, Stop: 8347, Start Num: 14

Candidate Starts for Schaffner\_8:

(Start: 14 @7952 has 82 MA's), (42, 8144), (46, 8189),

Gene: Scowl\_18 Start: 13430, Stop: 13879, Start Num: 18

Candidate Starts for Scowl\_18:

(Start: 18 @13430 has 208 MA's), (Start: 22 @13454 has 1 MA's), (78, 13841),

Gene: Seabiscuit\_19 Start: 12965, Stop: 13414, Start Num: 18

Candidate Starts for Seabiscuit\_19:

(Start: 18 @12965 has 208 MA's), (Start: 22 @12989 has 1 MA's), (63, 13301), (78, 13376),

Gene: Seanderson\_18 Start: 13400, Stop: 13849, Start Num: 18

Candidate Starts for Seanderson\_18:

(Start: 18 @13400 has 208 MA's), (Start: 22 @13424 has 1 MA's), (63, 13736), (78, 13811),

Gene: ShakeltOph\_7 Start: 6172, Stop: 6573, Start Num: 14

Candidate Starts for ShakeltOph\_7:

(Start: 14 @6172 has 82 MA's), (46, 6409),

Gene: ShortQueendom\_16 Start: 12839, Stop: 13288, Start Num: 18

Candidate Starts for ShortQueendom\_16:

(Start: 18 @12839 has 208 MA's), (Start: 22 @12863 has 1 MA's), (63, 13175), (78, 13250),

Gene: Sibs6\_19 Start: 13476, Stop: 13925, Start Num: 18

Candidate Starts for Sibs6\_19:

(Start: 18 @13476 has 208 MA's), (Start: 22 @13500 has 1 MA's), (63, 13812), (78, 13887),

Gene: Simpson\_8 Start: 7843, Stop: 8250, Start Num: 14

Candidate Starts for Simpson\_8:

(Start: 14 @7843 has 82 MA's), (42, 8035),

Gene: Skelbel\_8 Start: 7827, Stop: 8234, Start Num: 14

Candidate Starts for Skelbel\_8:

(Start: 14 @7827 has 82 MA's), (41, 8016), (42, 8019), (44, 8025), (46, 8064),

Gene: SkiPole\_19 Start: 13053, Stop: 13502, Start Num: 18  
Candidate Starts for SkiPole\_19:  
(Start: 18 @13053 has 208 MA's), (Start: 22 @13077 has 1 MA's), (63, 13389), (78, 13464),

Gene: Slagathor\_18 Start: 12828, Stop: 13277, Start Num: 18  
Candidate Starts for Slagathor\_18:  
(Start: 18 @12828 has 208 MA's), (Start: 22 @12852 has 1 MA's), (63, 13164), (78, 13239),

Gene: Smairt\_18 Start: 13659, Stop: 14108, Start Num: 18  
Candidate Starts for Smairt\_18:  
(Start: 18 @13659 has 208 MA's), (Start: 22 @13683 has 1 MA's), (63, 13995), (78, 14070),

Gene: Smeagol\_19 Start: 14248, Stop: 14697, Start Num: 18  
Candidate Starts for Smeagol\_19:  
(Start: 18 @14248 has 208 MA's), (Start: 22 @14272 has 1 MA's), (63, 14584), (78, 14659),

Gene: Snazzy\_15 Start: 12348, Stop: 12797, Start Num: 18  
Candidate Starts for Snazzy\_15:  
(Start: 18 @12348 has 208 MA's), (Start: 22 @12372 has 1 MA's), (63, 12684), (78, 12759),

Gene: Snek\_8 Start: 6968, Stop: 7366, Start Num: 14  
Candidate Starts for Snek\_8:  
(Start: 14 @6968 has 82 MA's),

Gene: Snorlax\_11 Start: 8364, Stop: 8813, Start Num: 17  
Candidate Starts for Snorlax\_11:  
(Start: 17 @8364 has 105 MA's), (45, 8553), (76, 8757),

Gene: Solon\_17 Start: 13511, Stop: 13960, Start Num: 18  
Candidate Starts for Solon\_17:  
(Start: 18 @13511 has 208 MA's), (Start: 22 @13535 has 1 MA's), (63, 13847),

Gene: Soondubu\_8 Start: 7865, Stop: 8263, Start Num: 14  
Candidate Starts for Soondubu\_8:  
(Start: 14 @7865 has 82 MA's), (38, 8045), (42, 8057),

Gene: Sooty\_8 Start: 7253, Stop: 7720, Start Num: 14  
Candidate Starts for Sooty\_8:  
(2, 7202), (Start: 14 @7253 has 82 MA's), (40, 7445), (50, 7526), (58, 7577),

Gene: Sorpresa\_17 Start: 12879, Stop: 13328, Start Num: 18  
Candidate Starts for Sorpresa\_17:  
(Start: 18 @12879 has 208 MA's), (Start: 22 @12903 has 1 MA's), (63, 13215), (78, 13290),

Gene: South40\_12 Start: 8637, Stop: 9086, Start Num: 17  
Candidate Starts for South40\_12:  
(Start: 6 @8580 has 1 MA's), (Start: 17 @8637 has 105 MA's), (45, 8826),

Gene: SpecialK\_8 Start: 7250, Stop: 7717, Start Num: 14  
Candidate Starts for SpecialK\_8:  
(2, 7199), (Start: 14 @7250 has 82 MA's), (40, 7442), (50, 7523),

Gene: Speedwell\_16 Start: 10184, Stop: 10633, Start Num: 17

Candidate Starts for Speedwell\_16:

(Start: 17 @10184 has 105 MA's), (27, 10247), (38, 10334), (45, 10373), (65, 10529), (83, 10610),

Gene: SpikeBT\_19 Start: 13815, Stop: 14264, Start Num: 18

Candidate Starts for SpikeBT\_19:

(Start: 18 @13815 has 208 MA's), (Start: 22 @13839 has 1 MA's), (63, 14151), (78, 14226),

Gene: SqueakyClean\_12 Start: 8473, Stop: 8961, Start Num: 17

Candidate Starts for SqueakyClean\_12:

(3, 8404), (Start: 17 @8473 has 105 MA's), (31, 8584), (35, 8614), (39, 8635), (45, 8671), (61, 8785), (65, 8827), (66, 8833), (79, 8902),

Gene: Squee\_18 Start: 13649, Stop: 14098, Start Num: 18

Candidate Starts for Squee\_18:

(Start: 18 @13649 has 208 MA's), (Start: 22 @13673 has 1 MA's), (63, 13985), (78, 14060),

Gene: StewieG\_16 Start: 12723, Stop: 13172, Start Num: 18

Candidate Starts for StewieG\_16:

(Start: 18 @12723 has 208 MA's), (Start: 22 @12747 has 1 MA's), (63, 13059), (78, 13134),

Gene: StrongArm\_16 Start: 13900, Stop: 14349, Start Num: 18

Candidate Starts for StrongArm\_16:

(Start: 18 @13900 has 208 MA's), (Start: 22 @13924 has 1 MA's), (63, 14236), (78, 14311),

Gene: Stuu\_8 Start: 7343, Stop: 7810, Start Num: 14

Candidate Starts for Stuu\_8:

(2, 7292), (Start: 14 @7343 has 82 MA's), (40, 7535), (50, 7616),

Gene: SuMoo\_7 Start: 6373, Stop: 6852, Start Num: 14

Candidate Starts for SuMoo\_7:

(Start: 14 @6373 has 82 MA's), (51, 6649), (80, 6844),

Gene: Subaru\_8 Start: 7827, Stop: 8234, Start Num: 14

Candidate Starts for Subaru\_8:

(Start: 14 @7827 has 82 MA's), (41, 8016), (42, 8019), (44, 8025), (46, 8064),

Gene: Sudan\_12 Start: 8444, Stop: 8905, Start Num: 17

Candidate Starts for Sudan\_12:

(Start: 17 @8444 has 105 MA's), (21, 8459), (45, 8633), (65, 8789), (84, 8891),

Gene: Sue2\_8 Start: 7875, Stop: 8270, Start Num: 14

Candidate Starts for Sue2\_8:

(Start: 14 @7875 has 82 MA's), (46, 8112),

Gene: Sujidade\_12 Start: 8602, Stop: 9108, Start Num: 6

Candidate Starts for Sujidade\_12:

(Start: 6 @8602 has 1 MA's), (Start: 17 @8659 has 105 MA's), (45, 8848), (65, 9004),

Gene: Sumter\_16 Start: 12470, Stop: 12919, Start Num: 18

Candidate Starts for Sumter\_16:

(Start: 18 @12470 has 208 MA's), (Start: 22 @12494 has 1 MA's), (63, 12806), (78, 12881),

Gene: SunsetPointe\_11 Start: 8385, Stop: 8837, Start Num: 17

Candidate Starts for SunsetPointe\_11:  
(10, 8346), (Start: 17 @8385 has 105 MA's), (45, 8577), (65, 8733),

Gene: Sunshine924\_16 Start: 12454, Stop: 12903, Start Num: 18  
Candidate Starts for Sunshine924\_16:  
(Start: 18 @12454 has 208 MA's), (Start: 22 @12478 has 1 MA's), (63, 12790), (78, 12865),

Gene: SuperHands\_9 Start: 8209, Stop: 8697, Start Num: 14  
Candidate Starts for SuperHands\_9:  
(Start: 14 @8209 has 82 MA's), (23, 8254), (50, 8479), (57, 8524), (71, 8617),

Gene: Superstar\_13 Start: 9291, Stop: 9767, Start Num: 17  
Candidate Starts for Superstar\_13:  
(Start: 17 @9291 has 105 MA's), (45, 9489), (70, 9681), (84, 9753),

Gene: SwissCheese\_17 Start: 12915, Stop: 13364, Start Num: 18  
Candidate Starts for SwissCheese\_17:  
(Start: 18 @12915 has 208 MA's), (Start: 22 @12939 has 1 MA's), (63, 13251), (78, 13326),

Gene: Switzer\_18 Start: 13071, Stop: 13520, Start Num: 18  
Candidate Starts for Switzer\_18:  
(Start: 18 @13071 has 208 MA's), (Start: 22 @13095 has 1 MA's), (63, 13407), (78, 13482),

Gene: Swole\_19 Start: 13381, Stop: 13830, Start Num: 18  
Candidate Starts for Swole\_19:  
(Start: 18 @13381 has 208 MA's), (Start: 22 @13405 has 1 MA's), (63, 13717), (78, 13792),

Gene: TagePhighter\_12 Start: 8364, Stop: 8813, Start Num: 17  
Candidate Starts for TagePhighter\_12:  
(Start: 17 @8364 has 105 MA's), (45, 8553), (76, 8757),

Gene: Tallboi\_8 Start: 7862, Stop: 8269, Start Num: 14  
Candidate Starts for Tallboi\_8:  
(Start: 14 @7862 has 82 MA's), (42, 8054),

Gene: Tasp14\_18 Start: 13160, Stop: 13609, Start Num: 18  
Candidate Starts for Tasp14\_18:  
(Start: 18 @13160 has 208 MA's), (Start: 22 @13184 has 1 MA's), (63, 13496), (78, 13571),

Gene: Tbone\_8 Start: 7839, Stop: 8246, Start Num: 14  
Candidate Starts for Tbone\_8:  
(Start: 14 @7839 has 82 MA's), (42, 8031),

Gene: Tefunt\_11 Start: 8160, Stop: 8636, Start Num: 17  
Candidate Starts for Tefunt\_11:  
(Start: 17 @8160 has 105 MA's), (39, 8322), (45, 8358),

Gene: Teodoridan\_15 Start: 12287, Stop: 12736, Start Num: 18  
Candidate Starts for Teodoridan\_15:  
(Start: 18 @12287 has 208 MA's), (Start: 22 @12311 has 1 MA's), (63, 12623), (78, 12698),

Gene: TforTroy\_8 Start: 7981, Stop: 8379, Start Num: 14  
Candidate Starts for TforTroy\_8:

(12, 7975), (Start: 14 @7981 has 82 MA's), (42, 8173), (46, 8218),

Gene: TheloniousMonk\_19 Start: 14195, Stop: 14644, Start Num: 18

Candidate Starts for TheloniousMonk\_19:

(Start: 18 @14195 has 208 MA's), (Start: 22 @14219 has 1 MA's), (63, 14531), (78, 14606),

Gene: Thestral\_12 Start: 8238, Stop: 8711, Start Num: 17

Candidate Starts for Thestral\_12:

(Start: 4 @8172 has 1 MA's), (7, 8187), (9, 8193), (Start: 14 @8217 has 82 MA's), (Start: 17 @8238 has 105 MA's), (32, 8352), (42, 8406), (45, 8433), (84, 8697),

Gene: Thor\_17 Start: 13033, Stop: 13482, Start Num: 18

Candidate Starts for Thor\_17:

(Start: 18 @13033 has 208 MA's), (Start: 22 @13057 has 1 MA's), (63, 13369), (78, 13444),

Gene: ThursdayNight\_7 Start: 6385, Stop: 6780, Start Num: 14

Candidate Starts for ThursdayNight\_7:

(Start: 14 @6385 has 82 MA's), (24, 6436), (40, 6571), (46, 6622),

Gene: Tian\_8 Start: 7873, Stop: 8280, Start Num: 14

Candidate Starts for Tian\_8:

(Start: 14 @7873 has 82 MA's), (42, 8065), (46, 8110),

Gene: TinaBelcher\_11 Start: 8186, Stop: 8659, Start Num: 17

Candidate Starts for TinaBelcher\_11:

(Start: 4 @8120 has 1 MA's), (7, 8135), (9, 8141), (Start: 14 @8165 has 82 MA's), (Start: 17 @8186 has 105 MA's), (32, 8300), (45, 8381), (84, 8645),

Gene: Toma\_11 Start: 8367, Stop: 8816, Start Num: 17

Candidate Starts for Toma\_11:

(Start: 6 @8310 has 1 MA's), (Start: 17 @8367 has 105 MA's), (45, 8556), (65, 8712),

Gene: Topgun\_17 Start: 12635, Stop: 13084, Start Num: 18

Candidate Starts for Topgun\_17:

(Start: 18 @12635 has 208 MA's), (63, 12971), (78, 13046),

Gene: Tote\_19 Start: 13381, Stop: 13830, Start Num: 18

Candidate Starts for Tote\_19:

(Start: 18 @13381 has 208 MA's), (Start: 22 @13405 has 1 MA's), (63, 13717), (78, 13792),

Gene: Traft412\_19 Start: 13862, Stop: 14311, Start Num: 18

Candidate Starts for Traft412\_19:

(Start: 18 @13862 has 208 MA's), (Start: 22 @13886 has 1 MA's), (63, 14198), (78, 14273),

Gene: Treddle\_19 Start: 14175, Stop: 14624, Start Num: 18

Candidate Starts for Treddle\_19:

(Start: 18 @14175 has 208 MA's), (Start: 22 @14199 has 1 MA's), (63, 14511), (78, 14586),

Gene: Tripl3t\_18 Start: 13860, Stop: 14309, Start Num: 18

Candidate Starts for Tripl3t\_18:

(Start: 18 @13860 has 208 MA's), (Start: 22 @13884 has 1 MA's), (63, 14196), (78, 14271),

Gene: Triste\_11 Start: 8358, Stop: 8807, Start Num: 17

Candidate Starts for Triste\_11:

(Start: 6 @8301 has 1 MA's), (Start: 17 @8358 has 105 MA's), (45, 8547), (76, 8751),

Gene: Triumph\_13 Start: 8256, Stop: 8726, Start Num: 17

Candidate Starts for Triumph\_13:

(Start: 17 @8256 has 105 MA's), (45, 8454), (61, 8568), (70, 8646),

Gene: Trouble\_17 Start: 13221, Stop: 13670, Start Num: 18

Candidate Starts for Trouble\_17:

(Start: 18 @13221 has 208 MA's), (Start: 22 @13245 has 1 MA's), (63, 13557), (78, 13632),

Gene: TrvxScott\_10 Start: 8121, Stop: 8660, Start Num: 4

Candidate Starts for TrvxScott\_10:

(Start: 4 @8121 has 1 MA's), (7, 8136), (9, 8142), (Start: 14 @8166 has 82 MA's), (Start: 17 @8187 has 105 MA's), (32, 8301), (45, 8382), (84, 8646),

Gene: TuanPN\_11 Start: 8367, Stop: 8816, Start Num: 17

Candidate Starts for TuanPN\_11:

(Start: 6 @8310 has 1 MA's), (Start: 17 @8367 has 105 MA's), (45, 8556), (76, 8760),

Gene: Tuck\_9 Start: 8887, Stop: 9315, Start Num: 14

Candidate Starts for Tuck\_9:

(Start: 14 @8887 has 82 MA's), (42, 9079),

Gene: Turab\_8 Start: 7857, Stop: 8264, Start Num: 14

Candidate Starts for Turab\_8:

(Start: 14 @7857 has 82 MA's), (42, 8049), (46, 8094),

Gene: Turj99\_16 Start: 12659, Stop: 13108, Start Num: 18

Candidate Starts for Turj99\_16:

(Start: 18 @12659 has 208 MA's), (78, 13070),

Gene: Tutumahutu\_8 Start: 7893, Stop: 8300, Start Num: 14

Candidate Starts for Tutumahutu\_8:

(Start: 14 @7893 has 82 MA's), (42, 8085),

Gene: Tweety19\_8 Start: 6967, Stop: 7365, Start Num: 14

Candidate Starts for Tweety19\_8:

(Start: 14 @6967 has 82 MA's),

Gene: TwoPeat\_18 Start: 13174, Stop: 13623, Start Num: 18

Candidate Starts for TwoPeat\_18:

(Start: 18 @13174 has 208 MA's), (Start: 22 @13198 has 1 MA's), (63, 13510), (78, 13585),

Gene: U2\_17 Start: 13077, Stop: 13526, Start Num: 18

Candidate Starts for U2\_17:

(Start: 18 @13077 has 208 MA's), (Start: 22 @13101 has 1 MA's), (63, 13413), (78, 13488),

Gene: Unstoppable\_11 Start: 8386, Stop: 8838, Start Num: 17

Candidate Starts for Unstoppable\_11:

(10, 8347), (Start: 17 @8386 has 105 MA's), (45, 8578), (65, 8734),

Gene: Urza\_11 Start: 8599, Stop: 9084, Start Num: 17

Candidate Starts for Urza\_11:

(Start: 17 @8599 has 105 MA's), (39, 8752), (45, 8788), (56, 8875),

Gene: UtzChips\_7 Start: 7094, Stop: 7573, Start Num: 14

Candidate Starts for UtzChips\_7:

(13, 7088), (Start: 14 @7094 has 82 MA's), (80, 7565),

Gene: VResidence\_8 Start: 7916, Stop: 8323, Start Num: 14

Candidate Starts for VResidence\_8:

(Start: 14 @7916 has 82 MA's), (42, 8108),

Gene: Vanseggelen\_14 Start: 8092, Stop: 8553, Start Num: 17

Candidate Starts for Vanseggelen\_14:

(Start: 17 @8092 has 105 MA's), (21, 8107), (45, 8281), (65, 8437), (84, 8539),

Gene: Verabelle\_12 Start: 8442, Stop: 8903, Start Num: 17

Candidate Starts for Verabelle\_12:

(Start: 17 @8442 has 105 MA's), (21, 8457), (30, 8526), (45, 8631), (64, 8781), (83, 8874), (84, 8889),

Gene: Verse\_11 Start: 8560, Stop: 9018, Start Num: 17

Candidate Starts for Verse\_11:

(Start: 17 @8560 has 105 MA's), (27, 8623), (38, 8710), (45, 8749), (65, 8905), (83, 8989), (85, 9013),

Gene: VieEnRose\_11 Start: 8669, Stop: 9154, Start Num: 17

Candidate Starts for VieEnRose\_11:

(Start: 17 @8669 has 105 MA's), (21, 8684), (39, 8822), (45, 8858), (56, 8945),

Gene: Violet\_16 Start: 13466, Stop: 13915, Start Num: 18

Candidate Starts for Violet\_16:

(Start: 18 @13466 has 208 MA's), (63, 13802), (78, 13877),

Gene: VroomVroom\_7 Start: 6184, Stop: 6585, Start Num: 14

Candidate Starts for VroomVroom\_7:

(Start: 14 @6184 has 82 MA's), (46, 6421),

Gene: Warda\_8 Start: 7839, Stop: 8246, Start Num: 14

Candidate Starts for Warda\_8:

(Start: 14 @7839 has 82 MA's), (42, 8031),

Gene: Watermelon\_19 Start: 13772, Stop: 14221, Start Num: 18

Candidate Starts for Watermelon\_19:

(Start: 18 @13772 has 208 MA's), (Start: 22 @13796 has 1 MA's), (63, 14108), (78, 14183),

Gene: Werner\_11 Start: 8365, Stop: 8814, Start Num: 17

Candidate Starts for Werner\_11:

(Start: 17 @8365 has 105 MA's), (45, 8554), (76, 8758),

Gene: Whatever\_11 Start: 8365, Stop: 8814, Start Num: 17

Candidate Starts for Whatever\_11:

(Start: 17 @8365 has 105 MA's), (45, 8554), (76, 8758),

Gene: Wheeler\_17 Start: 13227, Stop: 13676, Start Num: 18

Candidate Starts for Wheeler\_17:

(Start: 18 @13227 has 208 MA's), (Start: 22 @13251 has 1 MA's), (63, 13563), (78, 13638),

Gene: Wildwest\_9 Start: 8762, Stop: 9178, Start Num: 14

Candidate Starts for Wildwest\_9:

(Start: 14 @8762 has 82 MA's), (42, 8954), (50, 9029),

Gene: Wilkins\_17 Start: 12635, Stop: 13084, Start Num: 18

Candidate Starts for Wilkins\_17:

(Start: 18 @12635 has 208 MA's), (63, 12971), (78, 13046),

Gene: Yang\_8 Start: 7957, Stop: 8352, Start Num: 14

Candidate Starts for Yang\_8:

(Start: 14 @7957 has 82 MA's), (42, 8149), (46, 8194),

Gene: Yasdnil\_11 Start: 8363, Stop: 8812, Start Num: 17

Candidate Starts for Yasdnil\_11:

(Start: 6 @8306 has 1 MA's), (Start: 17 @8363 has 105 MA's), (45, 8552), (76, 8756),

Gene: YesChef\_8 Start: 7893, Stop: 8300, Start Num: 14

Candidate Starts for YesChef\_8:

(Start: 14 @7893 has 82 MA's), (42, 8085),

Gene: Yosif\_12 Start: 8821, Stop: 9279, Start Num: 17

Candidate Starts for Yosif\_12:

(Start: 17 @8821 has 105 MA's), (39, 8974), (45, 9010), (50, 9058), (65, 9166), (83, 9250), (84, 9265),

Gene: Zainub\_13 Start: 8727, Stop: 9203, Start Num: 17

Candidate Starts for Zainub\_13:

(Start: 5 @8664 has 1 MA's), (8, 8679), (Start: 17 @8727 has 105 MA's), (33, 8847), (45, 8925), (70, 9117), (84, 9189),

Gene: ZamZam\_14 Start: 8459, Stop: 8908, Start Num: 17

Candidate Starts for ZamZam\_14:

(Start: 17 @8459 has 105 MA's), (25, 8495), (27, 8522), (38, 8609), (45, 8648), (65, 8804), (83, 8885),

Gene: Zeeculate\_16 Start: 12913, Stop: 13362, Start Num: 18

Candidate Starts for Zeeculate\_16:

(Start: 18 @12913 has 208 MA's), (Start: 22 @12937 has 1 MA's), (63, 13249), (78, 13324),

Gene: Zemlya\_12 Start: 8375, Stop: 8824, Start Num: 17

Candidate Starts for Zemlya\_12:

(Start: 6 @8318 has 1 MA's), (Start: 17 @8375 has 105 MA's), (38, 8525), (39, 8528), (45, 8564),

Gene: Zephyr\_17 Start: 13005, Stop: 13454, Start Num: 18

Candidate Starts for Zephyr\_17:

(Start: 18 @13005 has 208 MA's), (Start: 22 @13029 has 1 MA's), (63, 13341), (78, 13416),

Gene: Zeta1847\_7 Start: 6205, Stop: 6684, Start Num: 14

Candidate Starts for Zeta1847\_7:

(Start: 14 @6205 has 82 MA's), (20, 6235), (82, 6679),

Gene: Zeuska\_18 Start: 13447, Stop: 13896, Start Num: 18

Candidate Starts for Zeuska\_18:

(Start: 18 @13447 has 208 MA's), (Start: 22 @13471 has 1 MA's), (63, 13783), (78, 13858),

Gene: phiCAM\_12 Start: 10223, Stop: 10681, Start Num: 17

Candidate Starts for phiCAM\_12:

(Start: 17 @10223 has 105 MA's), (21, 10238), (45, 10412), (50, 10460), (65, 10568), (83, 10652), (85, 10676),

Gene: phiHau3\_13 Start: 8427, Stop: 8894, Start Num: 17

Candidate Starts for phiHau3\_13:

(Start: 17 @8427 has 105 MA's), (38, 8577), (39, 8580), (45, 8616), (56, 8703), (68, 8796), (73, 8814), (76, 8823), (84, 8880),