





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 283448 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283448 has 256 members, 34 are drafts.

Phages represented in each track:

- Track 1 : Jorgensen\_100, Ashballer\_91, Applejack\_88, Edtherson\_87, Bob3\_90, Abrogate\_880, Marco3\_91, Sunshine924\_93, Topgun\_89, Gandalf20\_90, Wilkins\_90, StewieG\_86, SkiPole\_98, Phlippers\_89, Rutherford\_91, RidgeCB\_89, Solon\_83, Paraselene\_87
- Track 2 : Monet\_92, Iqorha\_82, Treddle\_90, Inyanga\_82, Bxb1\_84, Fushigi\_84, Homines\_83, Crispicous1\_86
- Track 3 : BaconJack\_94
- Track 4 : Kugel\_94, Petp2012\_89, Arcanine\_94, Pelly\_94, Tripl3t\_91, Arlo\_96, Zephyr\_92, KikiBouba\_83, Blesser\_85, Ohno789\_95, PowerRanger\_85, CatBus\_81, Bigchungji\_86, Noxious\_83, Kykar\_88, Moose\_95, Atkinbua\_98, Kenmech\_93, Ajay\_84, Pepe\_86, Rajelicia\_89, Bruns\_96, BillKnuckles\_86, Acme\_91, MetalQZJ\_88, GageAP\_90, Aldrich\_81, Ciao\_94, Bigfoot\_86, GroundGoblin\_82, Sorpresa\_93, DrFeelGood\_85, Hermia\_84, Whitspit\_82, Maroc7\_92, Sibs6\_95, Magnar\_91, Niza\_89, Euphoria\_95, Mkhusele\_91, Greg\_90, MaryBeth\_91, Carlyle\_91, MrGordo\_92, Fajezeel\_90, Fascinus\_86, STLscum\_100, McSinger\_84, DreamCatcher\_102, Adahisdi\_85, DirtDevil\_83, Blackflame\_88, Oogway\_87, Traft412\_86, ILeeKay\_91, Sanya\_81, BigPaolini\_85, Ruotula\_94, ConceptII\_97, SwissCheese\_95, Alvin\_86, Dussy\_87, GrecoEtereo\_92, Museum\_90, Dexes\_93, Wheeler\_96, AFIS\_88, Rufus\_93, NEHalo\_88, Bethlehem\_87, Corvo\_94, Snazzy\_92, Puppet\_88, Eyeball\_94, Rubeus\_88, TheloniousMonk\_90, Hope4ever\_88, Sandaddy\_90, Abbyshoes\_89, Burton\_90, Chanagan\_91, Lopton\_88, CactusRose\_96, Forsytheast\_96, SpikeBT\_87, PattyP\_92
- Track 5 : Violet\_87
- Track 6 : KSSJEB\_91, Altman\_94, Kanely\_93, Seanderson\_89, CartmannCramer\_82
- Track 7 : HanShotFirst\_90
- Track 8 : Molly\_89, TwoPeat\_88, PSullivan\_87, ChristmasHams\_80, KBG\_87, Swole\_91, JuliaChild\_91, Tote\_86, Pita2\_91, Doom\_84
- Track 9 : Anglerfish\_93
- Track 10 : Pippin\_93
- Track 11 : Papez\_93, Michley\_91, Graduation\_93
- Track 12 : Francis47\_93, LilBib\_80, Agaliana\_87, Marcell\_83, Pinto\_87, Norz\_90, Slagathor\_92, PacerPaul\_93, Seabiscuit\_95
- Track 13 : Teodoridan\_93, Marchy\_81, Levia\_85, Espresso\_87, Mryolo\_84, Payneful\_77, PhineBark\_85
- Track 14 : Parliament\_90, Ringer\_90
- Track 15 : Squee\_92, Naira\_96, Fenn\_97

- Track 16 : KyMonks1A\_96, Licorice\_91, LunarLander\_80, Target\_90
- Track 17 : Mule\_92, PhrostyMug\_94, Smairt\_97, Trouble\_90, Tasp14\_87, Perseus\_90, Bexan\_87, StrongArm\_88, JackSparrow\_92, Beatrix\_89
- Track 18 : Ichabod\_96, Thor\_98, SarFire\_98, BPBiebs31\_97
- Track 19 : Sagefire\_86, Barriga\_101, Lamina13\_93, MilleFeuille\_88, HermioneGrange\_94, Nerujay\_93, Gachnar\_77, JC27\_94, Jerm2\_90, Marsha\_93, HarryOW\_91, Nhonho\_87, Rohr\_92, BigMau\_91, Sumter\_87, Marge\_87, Aeneas\_96, MPlant7149\_90, Hami1\_87
- Track 20 : QTRlifeCrisis\_86
- Track 21 : Dynamix\_92, Briton15\_95, Switzer\_91
- Track 22 : Bones\_86
- Track 23 : A6\_85, BeesKnees\_95, Jasper\_93, Dreamboat\_93, McGuire\_92, BK1\_85
- Track 24 : ShortQueendom\_80
- Track 25 : Froghopper\_79
- Track 26 : Smeagol\_90
- Track 27 : Petruccio\_88
- Track 28 : Watermelon\_89
- Track 29 : Paphu\_87
- Track 30 : Scowl\_90
- Track 31 : Rhynn\_85
- Track 32 : Magnito\_91
- Track 33 : PascalRango\_92, Manatee\_92
- Track 34 : ProMouse\_90
- Track 35 : Gyzlar\_83
- Track 36 : Peterson\_90
- Track 37 : Buttons\_85
- Track 38 : Severus\_82, PeaceMeal1\_81, Drake94\_81, KittenMittens\_79
- Track 39 : Shapes\_87, Rowdy\_87, RhynO\_72, DustyMartin\_87
- Track 40 : DontArgue\_79
- Track 41 : Poompha\_81
- Track 42 : Chupacabra\_81, OKCentral2016\_83
- Track 43 : Aneem\_90, MaCh\_89, TinyTimmy\_87, Munch\_88, Joselito\_87, Bowtie\_85, Kimba\_86, Ebony\_88, Gilberta\_87, Petersenfast\_83, Orange\_89, Mabel\_89, Snape\_89, Lucivia\_90, Timothy\_89
- Track 44 : Bud\_82
- Track 45 : Flaverint\_90
- Track 46 : Koduck\_86
- Track 47 : Kinmap\_88
- Track 48 : Fred313\_84
- Track 49 : HINdeR\_81
- Track 50 : PP\_04
- Track 51 : JacoRen57\_68
- Track 52 : Omega\_235
- Track 53 : Pound\_223

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

The start number called the most often in the published annotations is 36, it was called in 182 of the 222 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A6\_85, AFIS\_88, Abbyshoes\_89, Abrogate\_880, Acme\_91, Adahisdi\_85, Aeneas\_96, Agaliana\_87, Ajay\_84, Aldrich\_81, Altman\_94, Alvin\_86, Anglerfish\_93, Applejack\_88, Arcanine\_94, Arlo\_96, Ashballer\_91, Atkinbua\_98, BK1\_85, BaconJack\_94, Barriga\_101, Beatrix\_89, BeesKnees\_95, Bethlehem\_87, Bexan\_87, BigMau\_91, BigPaolini\_85, Bigchungi\_86, Bigfoot\_86, BillKnuckles\_86, Blackflame\_88, Blesser\_85, Bob3\_90, Bones\_86, Bruns\_96, Burton\_90, Buttons\_85, Bxb1\_84, CactusRose\_96, Carlyle\_91, CartmannCramer\_82, CatBus\_81, Chanagan\_91, ChristmasHams\_80, Ciao\_94, ConceptII\_97, Corvo\_94, Crispicious1\_86, Dexes\_93, DirtDevil\_83, Doom\_84, DrFeelGood\_85, DreamCatcher\_102, Dreamboat\_93, Dussy\_87, Edtherson\_87, Espresso\_87, Euphoria\_95, Eyeball\_94, Fajezeel\_90, Fascinus\_86, Fenn\_97, Forsytheast\_96, Francis47\_93, Froghopper\_79, Fushigi\_84, Gachnar\_77, GageAP\_90, Gandalf20\_90, GrecoEtereo\_92, Greg\_90, GroundGoblin\_82, Gyzlar\_83, Hami1\_87, HarryOW\_91, Hermia\_84, HermioneGrange\_94, Homines\_83, Hope4ever\_88, ILeeKay\_91, Inyanga\_82, Iqorha\_82, JC27\_94, JackSparrow\_92, Jasper\_93, Jerm2\_90, Jorgensen\_100, JuliaChild\_91, KBG\_87, KSSJEB\_91, Kanely\_93, Kenmech\_93, KikiBouba\_83, Kugel\_94, KyMonks1A\_96, Kykar\_88, Lamina13\_93, Levia\_85, Licorice\_91, LilBib\_80, Lopton\_88, LunarLander\_80, MPlant7149\_90, Magnar\_91, Magnito\_91, Manatee\_92, Marcell\_83, Marchy\_81, Marco3\_91, Marge\_87, Maroc7\_92, Marsha\_93, MaryBeth\_91, McGuire\_92, McSinger\_84, MetalQZJ\_88, MilleFeuille\_88, Mkhusei\_91, Molly\_89, Monet\_92, Moose\_95, MrGordo\_92, Mryolo\_84, Mule\_92, Museum\_90, NEHalo\_88, Naira\_96, Nerujay\_93, Nhonho\_87, Niza\_89, Norz\_90, Noxious\_83, Ohno789\_95, Oogway\_87, PSullivan\_87, PacerPaul\_93, Paphu\_87, Paraselene\_87, Parliament\_90, PascalRango\_92, PattyP\_92, Payneful\_77, Pelly\_94, Pepe\_86, Perseus\_90, Peterson\_90, Petp2012\_89, Petruchio\_88, PhineBark\_85, Phlippers\_89, PhrostyMug\_94, Pinto\_87, Pippin\_93, Pita2\_91, PowerRanger\_85, ProMouse\_90, Puppet\_88, QTRlifeCrisis\_86, Rajelicia\_89, Rhynn\_85, RidgeCB\_89, Ringer\_90, Rohr\_92, Rubeus\_88, Rufus\_93, Ruotula\_94, Rutherford\_91, STLscum\_100, Sagefire\_86, Sandaddy\_90, Sanya\_81, Scowl\_90, Seabiscuit\_95, Seanderson\_89, ShortQueendom\_80, Sibs6\_95, SkiPole\_98, Slagathor\_92, Smairt\_97, Smeagol\_90, Snazzy\_92, Solon\_83, Sorpresa\_93, SpikeBT\_87, Squee\_92, StewieG\_86, StrongArm\_88, Sumter\_87, Sunshine924\_93, SwissCheese\_95, Swole\_91, Target\_90, Tasp14\_87, Teodoridan\_93, TheloniousMonk\_90, Topgun\_89, Tote\_86, Traft412\_86, Treddle\_90, Tripl3t\_91, Trouble\_90, TwoPeat\_88, Violet\_87, Watermelon\_89, Wheeler\_96, Whitspit\_82, Wilkins\_90, Zephyr\_92,

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

- BPBiebs31\_97, Briton15\_95, Dynamix\_92, Graduation\_93, HINdeR\_81, HanShotFirst\_90, Ichabod\_96, Michley\_91, PP\_04, Papez\_93, SarFire\_98, Switzer\_91, Thor\_98,

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

- Aneem\_90, Bowtie\_85, Bud\_82, Chupacabra\_81, DontArgue\_79, Drake94\_81, DustyMartin\_87, Ebony\_88, Flaverint\_90, Fred313\_84, Gilberta\_87, JacoRen57\_68, Joselito\_87, Kimba\_86, Kinmap\_88, KittenMittens\_79, Koduck\_86, Lucivia\_90, MaCh\_89, Mabel\_89, Munch\_88, OKCentral2016\_83, Omega\_235, Orange\_89, PeaceMeal1\_81, Petersenfast\_83, Poompha\_81, Pound\_223, RhynO\_72, Rowdy\_87, Severus\_82, Shapes\_87, Snape\_89, Timothy\_89, TinyTimmy\_87,

**Summary by start number:**

Start 23:

- Found in 11 of 256 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 7 of 222
- Called 63.6% of time when present
- Phage (with cluster) where this start called: BPBiebs31\_97 (A1), Briton15\_95 (A1), Dynamix\_92 (A1), Ichabod\_96 (A1), SarFire\_98 (A1), Switzer\_91 (A1), Thor\_98 (A1),

Start 24:

- Found in 3 of 256 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 3 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Graduation\_93 (A1), Michley\_91 (A1), Papez\_93 (A1),

Start 28:

- Found in 1 of 256 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HINdeR\_81 (A7),

Start 29:

- Found in 1 of 256 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP\_04 (A7),

Start 32:

- Found in 1 of 256 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JacoRen57\_68 (AB),

Start 34:

- Found in 3 of 256 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 2 of 222
- Called 66.7% of time when present
- Phage (with cluster) where this start called: HanShotFirst\_90 (A1), Pound\_223 (J),

Start 36:

- Found in 221 of 256 ( 86.3% ) of genes in pham
- Manual Annotations of this start: 182 of 222
- Called 94.1% of time when present
- Phage (with cluster) where this start called: A6\_85 (A1), AFIS\_88 (A1), Abbyshoes\_89 (A1), Abrogate\_880 (A1), Acme\_91 (A1), Adahisdi\_85 (A1), Aeneas\_96 (A1), Agaliana\_87 (A1), Ajay\_84 (A1), Aldrich\_81 (A1), Altman\_94 (A1), Alvin\_86 (A1), Anglerfish\_93 (A1), Applejack\_88 (A1), Arcanine\_94 (A1), Arlo\_96 (A1), Ashballer\_91 (A1), Atkinbua\_98 (A1), BK1\_85 (A1), BaconJack\_94 (A1), Barriga\_101 (A1), Beatrix\_89 (A1), BeesKnees\_95 (A1), Bethlehem\_87 (A1), Bexan\_87 (A1), BigMau\_91 (A1), BigPaolini\_85 (A1), Bigchungji\_86 (A1), Bigfoot\_86 (A1), BillKnuckles\_86 (A1), Blackflame\_88 (A1), Blesser\_85 (A1), Bob3\_90 (A1), Bones\_86 (A1), Bruns\_96 (A1), Burton\_90 (A1), Buttons\_85 (A1), Bxb1\_84 (A1), CactusRose\_96 (A1), Carlyle\_91 (A1), CartmannCramer\_82 (A1), CatBus\_81 (A1), Chanagan\_91 (A1), ChristmasHams\_80 (A1), Ciao\_94 (A1), ConceptII\_97 (A1),

Corvo\_94 (A1), Crispicous1\_86 (A1), Dexes\_93 (A1), DirtDevil\_83 (A1), Doom\_84 (A1), DrFeelGood\_85 (A1), DreamCatcher\_102 (A1), Dreamboat\_93 (A1), Dussy\_87 (A1), Edtherson\_87 (A1), Espresso\_87 (A1), Euphoria\_95 (A1), Eyeball\_94 (A1), Fajezeel\_90 (A1), Fascinus\_86 (A1), Fenn\_97 (A1), Forsytheast\_96 (A1), Francis47\_93 (A1), Froghopper\_79 (A1), Fushigi\_84 (A1), Gachnar\_77 (A1), GageAP\_90 (A1), Gandalf20\_90 (A1), GrecoEtereo\_92 (A1), Greg\_90 (A1), GroundGoblin\_82 (A1), Gyzlar\_83 (A1), Hami1\_87 (A1), HarryOW\_91 (A1), Hermia\_84 (A1), HermioneGrange\_94 (A1), Homines\_83 (A1), Hope4ever\_88 (A1), ILeeKay\_91 (A1), Inyanga\_82 (A1), Iqorha\_82 (A1), JC27\_94 (A1), JackSparrow\_92 (A1), Jasper\_93 (A1), Jerm2\_90 (A1), Jorgensen\_100 (A1), JuliaChild\_91 (A1), KBG\_87 (A1), KSSJEB\_91 (A1), Kanely\_93 (A1), Kenmech\_93 (A1), KikiBouba\_83 (A1), Kugel\_94 (A1), KyMonks1A\_96 (A1), Kykar\_88 (A1), Lamina13\_93 (A1), Levia\_85 (A1), Licorice\_91 (A1), LilBib\_80 (A1), Lopton\_88 (A1), LunarLander\_80 (A1), MPlant7149\_90 (A1), Magnar\_91 (A1), Magnito\_91 (A1), Manatee\_92 (A1), Marcell\_83 (A1), Marchy\_81 (A1), Marco3\_91 (A1), Marge\_87 (A1), Maroc7\_92 (A1), Marsha\_93 (A1), MaryBeth\_91 (A1), McGuire\_92 (A1), McSinger\_84 (A1), MetalQZJ\_88 (A1), MilleFeuille\_88 (A1), Mkhuseleli\_91 (A1), Molly\_89 (A1), Monet\_92 (A1), Moose\_95 (A1), MrGordo\_92 (A1), Mryolo\_84 (A1), Mule\_92 (A1), Museum\_90 (A1), NEHalo\_88 (A1), Naira\_96 (A1), Nerujay\_93 (A1), Nhonho\_87 (A1), Niza\_89 (A1), Norz\_90 (A1), Noxious\_83 (A1), Ohno789\_95 (A1), Oogway\_87 (A1), PSullivan\_87 (A1), PacerPaul\_93 (A1), Paphu\_87 (A1), Paraselene\_87 (A1), Parliament\_90 (A1), PascalRango\_92 (A1), PattyP\_92 (A1), Payneful\_77 (A1), Pelly\_94 (A1), Pepe\_86 (A1), Perseus\_90 (A1), Peterson\_90 (A1), Petp2012\_89 (A1), Petruccio\_88 (A1), PhineBark\_85 (A1), Phlippers\_89 (A1), PhrostyMug\_94 (A1), Pinto\_87 (A1), Pippin\_93 (A1), Pita2\_91 (A1), PowerRanger\_85 (A1), ProMouse\_90 (A1), Puppet\_88 (A1), QTRLifeCrisis\_86 (A1), Rajelicia\_89 (A1), Rhynn\_85 (A1), RidgeCB\_89 (A1), Ringer\_90 (A1), Rohr\_92 (A1), Rubeus\_88 (A1), Rufus\_93 (A1), Ruotula\_94 (A1), Rutherferd\_91 (A1), STLscum\_100 (A1), Sagefire\_86 (A1), Sandaddy\_90 (A1), Sanya\_81 (A1), Scowl\_90 (A1), Seabiscuit\_95 (A1), Seanderson\_89 (A1), ShortQueendom\_80 (A1), Sibs6\_95 (A1), SkiPole\_98 (A1), Slagathor\_92 (A1), Smairt\_97 (A1), Smeagol\_90 (A1), Snazzy\_92 (A1), Solon\_83 (A1), Sorpresa\_93 (A1), SpikeBT\_87 (A1), Squee\_92 (A1), StewieG\_86 (A1), StrongArm\_88 (A1), Sumter\_87 (A1), Sunshine924\_93 (A1), SwissCheese\_95 (A1), Swole\_91 (A1), Target\_90 (A1), Tasp14\_87 (A1), Teodoridan\_93 (A1), TheloniousMonk\_90 (A1), Topgun\_89 (A1), Tote\_86 (A1), Traft412\_86 (A1), Treddle\_90 (A1), Tripl3t\_91 (A1), Trouble\_90 (A1), TwoPeat\_88 (A1), Violet\_87 (A1), Watermelon\_89 (A1), Wheeler\_96 (A1), Whitspitt\_82 (A1), Wilkins\_90 (A1), Zephyr\_92 (A1),

#### Start 37:

- Found in 1 of 256 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Omega\_235 (J),

#### Start 38:

- Found in 1 of 256 ( 0.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Koduck\_86 (A2),

#### Start 39:

- Found in 1 of 256 ( 0.4% ) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DontArgue\_79 (A10),

Start 40:

- Found in 17 of 256 ( 6.6% ) of genes in pham
- Manual Annotations of this start: 15 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aneem\_90 (A11), Bowtie\_85 (A11), Bud\_82 (A11), Ebony\_88 (A11), Flaverint\_90 (A11), Gilberta\_87 (A11), Joselito\_87 (A11), Kimba\_86 (A11), Lucivia\_90 (A11), MaCh\_89 (A11), Mabel\_89 (A11), Munch\_88 (A11), Orange\_89 (A11), Petersenfast\_83 (A11), Snape\_89 (A11), Timothy\_89 (A11), TinyTimmy\_87 (A11),

Start 42:

- Found in 1 of 256 ( 0.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap\_88 (A21),

Start 43:

- Found in 12 of 256 ( 4.7% ) of genes in pham
- Manual Annotations of this start: 9 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chupacabra\_81 (A10), Drake94\_81 (A10), DustyMartin\_87 (A10), Fred313\_84 (A3), KittenMittens\_79 (A10), OKCentral2016\_83 (A10), PeaceMeal1\_81 (A10), Poompha\_81 (A10), RhynO\_72 (A10), Rowdy\_87 (A10), Severus\_82 (A10), Shapes\_87 (A10),

### Summary by clusters:

There are 9 clusters represented in this pham: A21, AB, A11, A10, J, A1, A3, A2, A7,

Info for manual annotations of cluster A1:

- Start number 23 was manually annotated 7 times for cluster A1.
- Start number 24 was manually annotated 3 times for cluster A1.
- Start number 34 was manually annotated 1 time for cluster A1.
- Start number 36 was manually annotated 182 times for cluster A1.

Info for manual annotations of cluster A10:

- Start number 43 was manually annotated 8 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 40 was manually annotated 15 times for cluster A11.

Info for manual annotations of cluster A3:

- Start number 43 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster A7:

- Start number 28 was manually annotated 1 time for cluster A7.
- Start number 29 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster AB:

- Start number 32 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster J:

- Start number 34 was manually annotated 1 time for cluster J.
- Start number 37 was manually annotated 1 time for cluster J.

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

Gene: A6\_85 Start: 49336, Stop: 49130, Start Num: 36

Candidate Starts for A6\_85:

(Start: 36 @49336 has 182 MA's), (64, 49198),

Gene: AFIS\_88 Start: 51338, Stop: 51135, Start Num: 36

Candidate Starts for AFIS\_88:

(Start: 36 @51338 has 182 MA's), (64, 51203),

Gene: Abbysshoes\_89 Start: 50942, Stop: 50739, Start Num: 36

Candidate Starts for Abbysshoes\_89:

(Start: 36 @50942 has 182 MA's), (64, 50807),

Gene: Abrogate\_880 Start: 50891, Stop: 51097, Start Num: 36

Candidate Starts for Abrogate\_880:

(Start: 36 @50891 has 182 MA's), (64, 51029), (70, 51089),

Gene: Acme\_91 Start: 51412, Stop: 51209, Start Num: 36

Candidate Starts for Acme\_91:

(Start: 36 @51412 has 182 MA's), (64, 51277),

Gene: Adahisdi\_85 Start: 51316, Stop: 51113, Start Num: 36

Candidate Starts for Adahisdi\_85:

(Start: 36 @51316 has 182 MA's), (64, 51181),

Gene: Aeneas\_96 Start: 52191, Stop: 52397, Start Num: 36

Candidate Starts for Aeneas\_96:

(Start: 36 @52191 has 182 MA's), (64, 52329),

Gene: Agaliana\_87 Start: 49294, Stop: 49091, Start Num: 36

Candidate Starts for Agaliana\_87:

(Start: 36 @49294 has 182 MA's),

Gene: Ajay\_84 Start: 49128, Stop: 48925, Start Num: 36

Candidate Starts for Ajay\_84:

(Start: 36 @49128 has 182 MA's), (64, 48993),

Gene: Aldrich\_81 Start: 49082, Stop: 48879, Start Num: 36

Candidate Starts for Aldrich\_81:

(Start: 36 @49082 has 182 MA's), (64, 48947),

Gene: Altman\_94 Start: 52124, Stop: 51921, Start Num: 36

Candidate Starts for Altman\_94:  
(Start: 36 @52124 has 182 MA's), (64, 51989),

Gene: Alvin\_86 Start: 49180, Stop: 48977, Start Num: 36  
Candidate Starts for Alvin\_86:  
(Start: 36 @49180 has 182 MA's), (64, 49045),

Gene: Aneem\_90 Start: 48299, Stop: 48102, Start Num: 40  
Candidate Starts for Aneem\_90:  
(Start: 40 @48299 has 15 MA's), (65, 48170), (70, 48113),

Gene: Anglerfish\_93 Start: 51993, Stop: 51790, Start Num: 36  
Candidate Starts for Anglerfish\_93:  
(Start: 36 @51993 has 182 MA's), (64, 51858), (67, 51822),

Gene: Applejack\_88 Start: 48130, Stop: 48336, Start Num: 36  
Candidate Starts for Applejack\_88:  
(Start: 36 @48130 has 182 MA's), (64, 48268), (70, 48328),

Gene: Arcanine\_94 Start: 51887, Stop: 51687, Start Num: 36  
Candidate Starts for Arcanine\_94:  
(Start: 36 @51887 has 182 MA's), (64, 51755),

Gene: Arlo\_96 Start: 52566, Stop: 52363, Start Num: 36  
Candidate Starts for Arlo\_96:  
(Start: 36 @52566 has 182 MA's), (64, 52431),

Gene: Ashballe\_91 Start: 50593, Stop: 50799, Start Num: 36  
Candidate Starts for Ashballe\_91:  
(Start: 36 @50593 has 182 MA's), (64, 50731), (70, 50791),

Gene: Atkinbua\_98 Start: 52558, Stop: 52355, Start Num: 36  
Candidate Starts for Atkinbua\_98:  
(Start: 36 @52558 has 182 MA's), (64, 52423),

Gene: BK1\_85 Start: 49336, Stop: 49130, Start Num: 36  
Candidate Starts for BK1\_85:  
(Start: 36 @49336 has 182 MA's), (64, 49198),

Gene: BPBiabs31\_97 Start: 52824, Stop: 52570, Start Num: 23  
Candidate Starts for BPBiabs31\_97:  
(Start: 23 @52824 has 7 MA's), (Start: 36 @52773 has 182 MA's), (64, 52638),

Gene: BaconJack\_94 Start: 52144, Stop: 52350, Start Num: 36  
Candidate Starts for BaconJack\_94:  
(Start: 36 @52144 has 182 MA's), (64, 52282), (70, 52342),

Gene: Barriga\_101 Start: 51933, Stop: 52139, Start Num: 36  
Candidate Starts for Barriga\_101:  
(Start: 36 @51933 has 182 MA's), (64, 52071),

Gene: Beatrix\_89 Start: 50789, Stop: 50995, Start Num: 36  
Candidate Starts for Beatrix\_89:

(Start: 36 @50789 has 182 MA's), (64, 50927),

Gene: BeesKnees\_95 Start: 51081, Stop: 50878, Start Num: 36

Candidate Starts for BeesKnees\_95:

(Start: 36 @51081 has 182 MA's), (64, 50946),

Gene: Bethlehem\_87 Start: 51847, Stop: 51644, Start Num: 36

Candidate Starts for Bethlehem\_87:

(Start: 36 @51847 has 182 MA's), (64, 51712),

Gene: Bexan\_87 Start: 50565, Stop: 50771, Start Num: 36

Candidate Starts for Bexan\_87:

(Start: 36 @50565 has 182 MA's), (64, 50703),

Gene: BigMau\_91 Start: 51153, Stop: 51362, Start Num: 36

Candidate Starts for BigMau\_91:

(Start: 36 @51153 has 182 MA's), (64, 51291),

Gene: BigPaolini\_85 Start: 49205, Stop: 49005, Start Num: 36

Candidate Starts for BigPaolini\_85:

(Start: 36 @49205 has 182 MA's), (64, 49073),

Gene: Bigchungi\_86 Start: 50716, Stop: 50513, Start Num: 36

Candidate Starts for Bigchungi\_86:

(Start: 36 @50716 has 182 MA's), (64, 50581),

Gene: Bigfoot\_86 Start: 51251, Stop: 51048, Start Num: 36

Candidate Starts for Bigfoot\_86:

(Start: 36 @51251 has 182 MA's), (64, 51116),

Gene: BillKnuckles\_86 Start: 51482, Stop: 51279, Start Num: 36

Candidate Starts for BillKnuckles\_86:

(Start: 36 @51482 has 182 MA's), (64, 51347),

Gene: Blackflame\_88 Start: 52641, Stop: 52438, Start Num: 36

Candidate Starts for Blackflame\_88:

(Start: 36 @52641 has 182 MA's), (64, 52506),

Gene: Blesser\_85 Start: 49105, Stop: 48902, Start Num: 36

Candidate Starts for Blesser\_85:

(Start: 36 @49105 has 182 MA's), (64, 48970),

Gene: Bob3\_90 Start: 50587, Stop: 50793, Start Num: 36

Candidate Starts for Bob3\_90:

(Start: 36 @50587 has 182 MA's), (64, 50725), (70, 50785),

Gene: Bones\_86 Start: 51038, Stop: 51244, Start Num: 36

Candidate Starts for Bones\_86:

(Start: 36 @51038 has 182 MA's), (64, 51176),

Gene: Bowtie\_85 Start: 46906, Stop: 46709, Start Num: 40

Candidate Starts for Bowtie\_85:

(Start: 40 @46906 has 15 MA's), (65, 46777), (70, 46720),

Gene: Briton15\_95 Start: 52689, Stop: 52435, Start Num: 23  
Candidate Starts for Briton15\_95:  
(Start: 23 @52689 has 7 MA's), (Start: 36 @52638 has 182 MA's),

Gene: Bruns\_96 Start: 52614, Stop: 52411, Start Num: 36  
Candidate Starts for Bruns\_96:  
(Start: 36 @52614 has 182 MA's), (64, 52479),

Gene: Bud\_82 Start: 46736, Stop: 46539, Start Num: 40  
Candidate Starts for Bud\_82:  
(4, 47042), (Start: 40 @46736 has 15 MA's), (65, 46607), (70, 46550),

Gene: Burton\_90 Start: 52230, Stop: 52027, Start Num: 36  
Candidate Starts for Burton\_90:  
(Start: 36 @52230 has 182 MA's), (64, 52095),

Gene: Buttons\_85 Start: 48633, Stop: 48430, Start Num: 36  
Candidate Starts for Buttons\_85:  
(Start: 36 @48633 has 182 MA's), (64, 48498), (70, 48438),

Gene: Bxb1\_84 Start: 48903, Stop: 49112, Start Num: 36  
Candidate Starts for Bxb1\_84:  
(Start: 36 @48903 has 182 MA's), (64, 49044), (70, 49104),

Gene: CactusRose\_96 Start: 52264, Stop: 52061, Start Num: 36  
Candidate Starts for CactusRose\_96:  
(Start: 36 @52264 has 182 MA's), (64, 52129),

Gene: Carlyle\_91 Start: 50831, Stop: 50628, Start Num: 36  
Candidate Starts for Carlyle\_91:  
(Start: 36 @50831 has 182 MA's), (64, 50696),

Gene: CartmannCramer\_82 Start: 50392, Stop: 50189, Start Num: 36  
Candidate Starts for CartmannCramer\_82:  
(Start: 36 @50392 has 182 MA's), (64, 50257),

Gene: CatBus\_81 Start: 49274, Stop: 49071, Start Num: 36  
Candidate Starts for CatBus\_81:  
(Start: 36 @49274 has 182 MA's), (64, 49139),

Gene: Chanagan\_91 Start: 50342, Stop: 50139, Start Num: 36  
Candidate Starts for Chanagan\_91:  
(Start: 36 @50342 has 182 MA's), (64, 50207),

Gene: ChristmasHams\_80 Start: 47861, Stop: 47658, Start Num: 36  
Candidate Starts for ChristmasHams\_80:  
(13, 48008), (15, 47996), (17, 47972), (Start: 36 @47861 has 182 MA's), (64, 47726), (70, 47666),

Gene: Chupacabra\_81 Start: 48564, Stop: 48376, Start Num: 43  
Candidate Starts for Chupacabra\_81:  
(35, 48597), (Start: 43 @48564 has 9 MA's), (64, 48444), (65, 48441),

Gene: Ciao\_94 Start: 50559, Stop: 50362, Start Num: 36  
Candidate Starts for Ciao\_94:  
(Start: 36 @50559 has 182 MA's), (64, 50430),

Gene: ConceptII\_97 Start: 52890, Stop: 52687, Start Num: 36  
Candidate Starts for ConceptII\_97:  
(Start: 36 @52890 has 182 MA's), (64, 52755),

Gene: Corvo\_94 Start: 52995, Stop: 52792, Start Num: 36  
Candidate Starts for Corvo\_94:  
(Start: 36 @52995 has 182 MA's), (64, 52860),

Gene: Crispicous1\_86 Start: 49167, Stop: 49370, Start Num: 36  
Candidate Starts for Crispicous1\_86:  
(Start: 36 @49167 has 182 MA's), (64, 49302), (70, 49362),

Gene: Dexes\_93 Start: 53941, Stop: 53738, Start Num: 36  
Candidate Starts for Dexes\_93:  
(Start: 36 @53941 has 182 MA's), (64, 53806),

Gene: DirtDevil\_83 Start: 49082, Stop: 48879, Start Num: 36  
Candidate Starts for DirtDevil\_83:  
(Start: 36 @49082 has 182 MA's), (64, 48947),

Gene: DontArgue\_79 Start: 47454, Stop: 47233, Start Num: 39  
Candidate Starts for DontArgue\_79:  
(12, 47628), (22, 47532), (39, 47454), (53, 47394), (65, 47307),

Gene: Doom\_84 Start: 50622, Stop: 50419, Start Num: 36  
Candidate Starts for Doom\_84:  
(13, 50769), (15, 50757), (17, 50733), (Start: 36 @50622 has 182 MA's), (64, 50487), (70, 50427),

Gene: DrFeelGood\_85 Start: 49766, Stop: 49563, Start Num: 36  
Candidate Starts for DrFeelGood\_85:  
(Start: 36 @49766 has 182 MA's), (64, 49631),

Gene: Drake94\_81 Start: 47718, Stop: 47530, Start Num: 43  
Candidate Starts for Drake94\_81:  
(35, 47751), (Start: 43 @47718 has 9 MA's), (65, 47595),

Gene: DreamCatcher\_102 Start: 53024, Stop: 52821, Start Num: 36  
Candidate Starts for DreamCatcher\_102:  
(Start: 36 @53024 has 182 MA's), (64, 52889),

Gene: Dreamboat\_93 Start: 50459, Stop: 50256, Start Num: 36  
Candidate Starts for Dreamboat\_93:  
(Start: 36 @50459 has 182 MA's), (64, 50324),

Gene: Dussy\_87 Start: 50962, Stop: 50759, Start Num: 36  
Candidate Starts for Dussy\_87:  
(Start: 36 @50962 has 182 MA's), (64, 50827),

Gene: DustyMartin\_87 Start: 48813, Stop: 48628, Start Num: 43

Candidate Starts for DustyMartin\_87:  
(3, 49131), (10, 49041), (12, 49002), (31, 48858), (Start: 43 @48813 has 9 MA's), (47, 48792), (57, 48756), (65, 48693), (67, 48660),

Gene: Dynamix\_92 Start: 50284, Stop: 50030, Start Num: 23  
Candidate Starts for Dynamix\_92:  
(Start: 23 @50284 has 7 MA's), (Start: 36 @50233 has 182 MA's),

Gene: Ebony\_88 Start: 47870, Stop: 47673, Start Num: 40  
Candidate Starts for Ebony\_88:  
(Start: 40 @47870 has 15 MA's), (65, 47741), (70, 47684),

Gene: Edtherson\_87 Start: 49832, Stop: 50038, Start Num: 36  
Candidate Starts for Edtherson\_87:  
(Start: 36 @49832 has 182 MA's), (64, 49970), (70, 50030),

Gene: Espresso\_87 Start: 50463, Stop: 50666, Start Num: 36  
Candidate Starts for Espresso\_87:  
(Start: 36 @50463 has 182 MA's), (64, 50598),

Gene: Euphoria\_95 Start: 53188, Stop: 52985, Start Num: 36  
Candidate Starts for Euphoria\_95:  
(Start: 36 @53188 has 182 MA's), (64, 53053),

Gene: Eyeball\_94 Start: 51846, Stop: 51643, Start Num: 36  
Candidate Starts for Eyeball\_94:  
(Start: 36 @51846 has 182 MA's), (64, 51711),

Gene: Fajezeel\_90 Start: 50702, Stop: 50499, Start Num: 36  
Candidate Starts for Fajezeel\_90:  
(Start: 36 @50702 has 182 MA's), (64, 50567),

Gene: Fascinus\_86 Start: 51761, Stop: 51558, Start Num: 36  
Candidate Starts for Fascinus\_86:  
(Start: 36 @51761 has 182 MA's), (64, 51626),

Gene: Fenn\_97 Start: 52841, Stop: 52638, Start Num: 36  
Candidate Starts for Fenn\_97:  
(Start: 36 @52841 has 182 MA's), (64, 52706),

Gene: Flaverint\_90 Start: 48297, Stop: 48100, Start Num: 40  
Candidate Starts for Flaverint\_90:  
(Start: 40 @48297 has 15 MA's), (65, 48168), (66, 48150), (70, 48111),

Gene: Forsytheast\_96 Start: 52313, Stop: 52110, Start Num: 36  
Candidate Starts for Forsytheast\_96:  
(Start: 36 @52313 has 182 MA's), (64, 52178),

Gene: Francis47\_93 Start: 53565, Stop: 53362, Start Num: 36  
Candidate Starts for Francis47\_93:  
(Start: 36 @53565 has 182 MA's),

Gene: Fred313\_84 Start: 47806, Stop: 47615, Start Num: 43

Candidate Starts for Fred313\_84:  
(1, 48295), (2, 48262), (7, 48079), (Start: 43 @47806 has 9 MA's), (58, 47746), (65, 47680),

Gene: Froghopper\_79 Start: 47225, Stop: 47428, Start Num: 36  
Candidate Starts for Froghopper\_79:  
(Start: 34 @47216 has 2 MA's), (Start: 36 @47225 has 182 MA's), (64, 47357),

Gene: Fushigi\_84 Start: 48765, Stop: 48968, Start Num: 36  
Candidate Starts for Fushigi\_84:  
(Start: 36 @48765 has 182 MA's), (64, 48900), (70, 48960),

Gene: Gachnar\_77 Start: 46581, Stop: 46787, Start Num: 36  
Candidate Starts for Gachnar\_77:  
(Start: 36 @46581 has 182 MA's), (64, 46719),

Gene: GageAP\_90 Start: 51509, Stop: 51306, Start Num: 36  
Candidate Starts for GageAP\_90:  
(Start: 36 @51509 has 182 MA's), (64, 51374),

Gene: Gandalf20\_90 Start: 50084, Stop: 50290, Start Num: 36  
Candidate Starts for Gandalf20\_90:  
(Start: 36 @50084 has 182 MA's), (64, 50222), (70, 50282),

Gene: Gilberta\_87 Start: 47173, Stop: 46976, Start Num: 40  
Candidate Starts for Gilberta\_87:  
(Start: 40 @47173 has 15 MA's), (65, 47044), (70, 46987),

Gene: Graduation\_93 Start: 51162, Stop: 50911, Start Num: 24  
Candidate Starts for Graduation\_93:  
(Start: 24 @51162 has 3 MA's), (Start: 36 @51114 has 182 MA's), (64, 50979),

Gene: GrecoEtereo\_92 Start: 51814, Stop: 51611, Start Num: 36  
Candidate Starts for GrecoEtereo\_92:  
(Start: 36 @51814 has 182 MA's), (64, 51679),

Gene: Greg\_90 Start: 50702, Stop: 50499, Start Num: 36  
Candidate Starts for Greg\_90:  
(Start: 36 @50702 has 182 MA's), (64, 50567),

Gene: GroundGoblin\_82 Start: 49224, Stop: 49021, Start Num: 36  
Candidate Starts for GroundGoblin\_82:  
(Start: 36 @49224 has 182 MA's), (64, 49089),

Gene: Gyzlar\_83 Start: 47405, Stop: 47608, Start Num: 36  
Candidate Starts for Gyzlar\_83:  
(18, 47294), (Start: 36 @47405 has 182 MA's), (64, 47540), (70, 47600),

Gene: HINdeR\_81 Start: 50361, Stop: 50110, Start Num: 28  
Candidate Starts for HINdeR\_81:  
(27, 50364), (Start: 28 @50361 has 1 MA's), (Start: 36 @50316 has 182 MA's), (51, 50265), (57, 50247), (65, 50175),

Gene: Hami1\_87 Start: 46210, Stop: 46416, Start Num: 36

Candidate Starts for Hami1\_87:  
(Start: 36 @46210 has 182 MA's), (64, 46348),

Gene: HanShotFirst\_90 Start: 51379, Stop: 51594, Start Num: 34  
Candidate Starts for HanShotFirst\_90:  
(9, 51163), (Start: 34 @51379 has 2 MA's), (Start: 36 @51388 has 182 MA's), (64, 51523),

Gene: HarryOW\_91 Start: 51434, Stop: 51640, Start Num: 36  
Candidate Starts for HarryOW\_91:  
(Start: 36 @51434 has 182 MA's), (64, 51572),

Gene: Hermia\_84 Start: 49274, Stop: 49071, Start Num: 36  
Candidate Starts for Hermia\_84:  
(Start: 36 @49274 has 182 MA's), (64, 49139),

Gene: HermioneGrange\_94 Start: 51648, Stop: 51857, Start Num: 36  
Candidate Starts for HermioneGrange\_94:  
(Start: 36 @51648 has 182 MA's), (64, 51786),

Gene: Homines\_83 Start: 46852, Stop: 47055, Start Num: 36  
Candidate Starts for Homines\_83:  
(Start: 36 @46852 has 182 MA's), (64, 46987), (70, 47047),

Gene: Hope4ever\_88 Start: 50126, Stop: 49923, Start Num: 36  
Candidate Starts for Hope4ever\_88:  
(Start: 36 @50126 has 182 MA's), (64, 49991),

Gene: ILeeKay\_91 Start: 50632, Stop: 50429, Start Num: 36  
Candidate Starts for ILeeKay\_91:  
(Start: 36 @50632 has 182 MA's), (64, 50497),

Gene: Ichabod\_96 Start: 52974, Stop: 52720, Start Num: 23  
Candidate Starts for Ichabod\_96:  
(Start: 23 @52974 has 7 MA's), (Start: 36 @52923 has 182 MA's), (64, 52788),

Gene: Inyanga\_82 Start: 49164, Stop: 49367, Start Num: 36  
Candidate Starts for Inyanga\_82:  
(Start: 36 @49164 has 182 MA's), (64, 49299), (70, 49359),

Gene: Iqorha\_82 Start: 49163, Stop: 49366, Start Num: 36  
Candidate Starts for Iqorha\_82:  
(Start: 36 @49163 has 182 MA's), (64, 49298), (70, 49358),

Gene: JC27\_94 Start: 50665, Stop: 50871, Start Num: 36  
Candidate Starts for JC27\_94:  
(Start: 36 @50665 has 182 MA's), (64, 50803),

Gene: JackSparrow\_92 Start: 50104, Stop: 50310, Start Num: 36  
Candidate Starts for JackSparrow\_92:  
(Start: 36 @50104 has 182 MA's), (64, 50242),

Gene: JacoRen57\_68 Start: 49553, Stop: 49792, Start Num: 32  
Candidate Starts for JacoRen57\_68:

(Start: 32 @49553 has 1 MA's), (50, 49622), (60, 49661), (67, 49754), (69, 49775),

Gene: Jasper\_93 Start: 50345, Stop: 50142, Start Num: 36

Candidate Starts for Jasper\_93:

(Start: 36 @50345 has 182 MA's), (64, 50210),

Gene: Jerm2\_90 Start: 51717, Stop: 51926, Start Num: 36

Candidate Starts for Jerm2\_90:

(Start: 36 @51717 has 182 MA's), (64, 51855),

Gene: Jorgensen\_100 Start: 52124, Stop: 52330, Start Num: 36

Candidate Starts for Jorgensen\_100:

(Start: 36 @52124 has 182 MA's), (64, 52262), (70, 52322),

Gene: Joselito\_87 Start: 48051, Stop: 47854, Start Num: 40

Candidate Starts for Joselito\_87:

(Start: 40 @48051 has 15 MA's), (65, 47922), (70, 47865),

Gene: JuliaChild\_91 Start: 51435, Stop: 51232, Start Num: 36

Candidate Starts for JuliaChild\_91:

(13, 51582), (15, 51570), (17, 51546), (Start: 36 @51435 has 182 MA's), (64, 51300), (70, 51240),

Gene: KBG\_87 Start: 52193, Stop: 51990, Start Num: 36

Candidate Starts for KBG\_87:

(13, 52340), (15, 52328), (17, 52304), (Start: 36 @52193 has 182 MA's), (64, 52058), (70, 51998),

Gene: KSSJEB\_91 Start: 50745, Stop: 50542, Start Num: 36

Candidate Starts for KSSJEB\_91:

(Start: 36 @50745 has 182 MA's), (64, 50610),

Gene: Kanely\_93 Start: 51901, Stop: 51698, Start Num: 36

Candidate Starts for Kanely\_93:

(Start: 36 @51901 has 182 MA's), (64, 51766),

Gene: Kenmech\_93 Start: 52088, Stop: 51885, Start Num: 36

Candidate Starts for Kenmech\_93:

(Start: 36 @52088 has 182 MA's), (64, 51953),

Gene: KikiBouba\_83 Start: 49083, Stop: 48880, Start Num: 36

Candidate Starts for KikiBouba\_83:

(Start: 36 @49083 has 182 MA's), (64, 48948),

Gene: Kimba\_86 Start: 47354, Stop: 47157, Start Num: 40

Candidate Starts for Kimba\_86:

(Start: 40 @47354 has 15 MA's), (65, 47225), (70, 47168),

Gene: Kinmap\_88 Start: 46506, Stop: 46321, Start Num: 42

Candidate Starts for Kinmap\_88:

(42, 46506), (48, 46485), (61, 46446), (62, 46440), (65, 46389), (69, 46335),

Gene: KittenMittens\_79 Start: 47725, Stop: 47537, Start Num: 43

Candidate Starts for KittenMittens\_79:

(35, 47758), (Start: 43 @47725 has 9 MA's), (65, 47602),

Gene: Koduck\_86 Start: 47511, Stop: 47308, Start Num: 38  
Candidate Starts for Koduck\_86:  
(33, 47526), (38, 47511), (52, 47457), (54, 47451), (65, 47373),

Gene: Kugel\_94 Start: 51995, Stop: 51792, Start Num: 36  
Candidate Starts for Kugel\_94:  
(Start: 36 @51995 has 182 MA's), (64, 51860),

Gene: KyMonks1A\_96 Start: 51763, Stop: 51560, Start Num: 36  
Candidate Starts for KyMonks1A\_96:  
(Start: 36 @51763 has 182 MA's), (64, 51628), (70, 51568),

Gene: Kykar\_88 Start: 49910, Stop: 49701, Start Num: 36  
Candidate Starts for Kykar\_88:  
(Start: 36 @49910 has 182 MA's), (64, 49769),

Gene: Lamina13\_93 Start: 51757, Stop: 51963, Start Num: 36  
Candidate Starts for Lamina13\_93:  
(Start: 36 @51757 has 182 MA's), (64, 51895),

Gene: Levia\_85 Start: 48437, Stop: 48640, Start Num: 36  
Candidate Starts for Levia\_85:  
(Start: 36 @48437 has 182 MA's), (64, 48572),

Gene: Licorice\_91 Start: 52878, Stop: 52678, Start Num: 36  
Candidate Starts for Licorice\_91:  
(Start: 36 @52878 has 182 MA's), (64, 52746), (70, 52686),

Gene: LilBib\_80 Start: 49937, Stop: 49734, Start Num: 36  
Candidate Starts for LilBib\_80:  
(Start: 36 @49937 has 182 MA's),

Gene: Lopton\_88 Start: 52012, Stop: 51809, Start Num: 36  
Candidate Starts for Lopton\_88:  
(Start: 36 @52012 has 182 MA's), (64, 51877),

Gene: Lucivia\_90 Start: 48330, Stop: 48133, Start Num: 40  
Candidate Starts for Lucivia\_90:  
(Start: 40 @48330 has 15 MA's), (65, 48201), (70, 48144),

Gene: LunarLander\_80 Start: 48577, Stop: 48374, Start Num: 36  
Candidate Starts for LunarLander\_80:  
(Start: 36 @48577 has 182 MA's), (64, 48442), (70, 48382),

Gene: MPlant7149\_90 Start: 49878, Stop: 50087, Start Num: 36  
Candidate Starts for MPlant7149\_90:  
(Start: 36 @49878 has 182 MA's), (64, 50016),

Gene: MaCh\_89 Start: 48294, Stop: 48097, Start Num: 40  
Candidate Starts for MaCh\_89:  
(Start: 40 @48294 has 15 MA's), (65, 48165), (70, 48108),

Gene: Mabel\_89 Start: 48295, Stop: 48098, Start Num: 40  
Candidate Starts for Mabel\_89:  
(Start: 40 @48295 has 15 MA's), (65, 48166), (70, 48109),

Gene: Magnar\_91 Start: 51040, Stop: 50837, Start Num: 36  
Candidate Starts for Magnar\_91:  
(Start: 36 @51040 has 182 MA's), (64, 50905),

Gene: Magnito\_91 Start: 51185, Stop: 50982, Start Num: 36  
Candidate Starts for Magnito\_91:  
(16, 51299), (25, 51236), (Start: 36 @51185 has 182 MA's), (64, 51050),

Gene: Manatee\_92 Start: 50646, Stop: 50443, Start Num: 36  
Candidate Starts for Manatee\_92:  
(Start: 23 @50697 has 7 MA's), (Start: 36 @50646 has 182 MA's),

Gene: Marcell\_83 Start: 48789, Stop: 48586, Start Num: 36  
Candidate Starts for Marcell\_83:  
(Start: 36 @48789 has 182 MA's),

Gene: Marchy\_81 Start: 47255, Stop: 47052, Start Num: 36  
Candidate Starts for Marchy\_81:  
(Start: 36 @47255 has 182 MA's), (64, 47120),

Gene: Marco3\_91 Start: 51455, Stop: 51661, Start Num: 36  
Candidate Starts for Marco3\_91:  
(Start: 36 @51455 has 182 MA's), (64, 51593), (70, 51653),

Gene: Marge\_87 Start: 49768, Stop: 49974, Start Num: 36  
Candidate Starts for Marge\_87:  
(Start: 36 @49768 has 182 MA's), (64, 49906),

Gene: Maroc7\_92 Start: 52980, Stop: 52777, Start Num: 36  
Candidate Starts for Maroc7\_92:  
(Start: 36 @52980 has 182 MA's), (64, 52845),

Gene: Marsha\_93 Start: 52954, Stop: 53160, Start Num: 36  
Candidate Starts for Marsha\_93:  
(Start: 36 @52954 has 182 MA's), (64, 53092),

Gene: MaryBeth\_91 Start: 51469, Stop: 51266, Start Num: 36  
Candidate Starts for MaryBeth\_91:  
(Start: 36 @51469 has 182 MA's), (64, 51334),

Gene: McGuire\_92 Start: 50898, Stop: 50695, Start Num: 36  
Candidate Starts for McGuire\_92:  
(Start: 36 @50898 has 182 MA's), (64, 50763),

Gene: McSinger\_84 Start: 49911, Stop: 49708, Start Num: 36  
Candidate Starts for McSinger\_84:  
(Start: 36 @49911 has 182 MA's), (64, 49776),

Gene: MetalQZJ\_88 Start: 51469, Stop: 51266, Start Num: 36

Candidate Starts for MetalQZJ\_88:  
(Start: 36 @51469 has 182 MA's), (64, 51334),

Gene: Michley\_91 Start: 50597, Stop: 50346, Start Num: 24  
Candidate Starts for Michley\_91:  
(Start: 24 @50597 has 3 MA's), (Start: 36 @50549 has 182 MA's), (64, 50414),

Gene: MilleFeuille\_88 Start: 50374, Stop: 50580, Start Num: 36  
Candidate Starts for MilleFeuille\_88:  
(Start: 36 @50374 has 182 MA's), (64, 50512),

Gene: Mkhuseli\_91 Start: 49763, Stop: 49557, Start Num: 36  
Candidate Starts for Mkhuseli\_91:  
(Start: 36 @49763 has 182 MA's), (64, 49625),

Gene: Molly\_89 Start: 49678, Stop: 49475, Start Num: 36  
Candidate Starts for Molly\_89:  
(13, 49825), (15, 49813), (17, 49789), (Start: 36 @49678 has 182 MA's), (64, 49543), (70, 49483),

Gene: Monet\_92 Start: 51735, Stop: 51938, Start Num: 36  
Candidate Starts for Monet\_92:  
(Start: 36 @51735 has 182 MA's), (64, 51870), (70, 51930),

Gene: Moose\_95 Start: 52313, Stop: 52110, Start Num: 36  
Candidate Starts for Moose\_95:  
(Start: 36 @52313 has 182 MA's), (64, 52178),

Gene: MrGordo\_92 Start: 50603, Stop: 50400, Start Num: 36  
Candidate Starts for MrGordo\_92:  
(Start: 36 @50603 has 182 MA's), (64, 50468),

Gene: Mryolo\_84 Start: 48769, Stop: 48972, Start Num: 36  
Candidate Starts for Mryolo\_84:  
(Start: 36 @48769 has 182 MA's), (64, 48904),

Gene: Mule\_92 Start: 49973, Stop: 50179, Start Num: 36  
Candidate Starts for Mule\_92:  
(Start: 36 @49973 has 182 MA's), (64, 50111),

Gene: Munch\_88 Start: 48299, Stop: 48102, Start Num: 40  
Candidate Starts for Munch\_88:  
(Start: 40 @48299 has 15 MA's), (65, 48170), (70, 48113),

Gene: Museum\_90 Start: 51040, Stop: 50837, Start Num: 36  
Candidate Starts for Museum\_90:  
(Start: 36 @51040 has 182 MA's), (64, 50905),

Gene: NEHalo\_88 Start: 50148, Stop: 49945, Start Num: 36  
Candidate Starts for NEHalo\_88:  
(Start: 36 @50148 has 182 MA's), (64, 50013),

Gene: Naira\_96 Start: 52973, Stop: 52770, Start Num: 36  
Candidate Starts for Naira\_96:

(Start: 36 @52973 has 182 MA's), (64, 52838),

Gene: Nerujay\_93 Start: 51720, Stop: 51926, Start Num: 36

Candidate Starts for Nerujay\_93:

(Start: 36 @51720 has 182 MA's), (64, 51858),

Gene: Nhonho\_87 Start: 50646, Stop: 50852, Start Num: 36

Candidate Starts for Nhonho\_87:

(Start: 36 @50646 has 182 MA's), (64, 50784),

Gene: Niza\_89 Start: 51286, Stop: 51083, Start Num: 36

Candidate Starts for Niza\_89:

(Start: 36 @51286 has 182 MA's), (64, 51151),

Gene: Norz\_90 Start: 53476, Stop: 53273, Start Num: 36

Candidate Starts for Norz\_90:

(Start: 36 @53476 has 182 MA's),

Gene: Noxious\_83 Start: 49598, Stop: 49395, Start Num: 36

Candidate Starts for Noxious\_83:

(Start: 36 @49598 has 182 MA's), (64, 49463),

Gene: OKCentral2016\_83 Start: 47802, Stop: 47614, Start Num: 43

Candidate Starts for OKCentral2016\_83:

(35, 47835), (Start: 43 @47802 has 9 MA's), (64, 47682), (65, 47679),

Gene: Ohno789\_95 Start: 52428, Stop: 52225, Start Num: 36

Candidate Starts for Ohno789\_95:

(Start: 36 @52428 has 182 MA's), (64, 52293),

Gene: Omega\_235 Start: 109887, Stop: 109675, Start Num: 37

Candidate Starts for Omega\_235:

(Start: 23 @109956 has 7 MA's), (Start: 37 @109887 has 1 MA's), (49, 109839), (55, 109821), (63, 109782), (67, 109710), (70, 109686),

Gene: Oogway\_87 Start: 51358, Stop: 51155, Start Num: 36

Candidate Starts for Oogway\_87:

(Start: 36 @51358 has 182 MA's), (64, 51223),

Gene: Orange\_89 Start: 47849, Stop: 47652, Start Num: 40

Candidate Starts for Orange\_89:

(Start: 40 @47849 has 15 MA's), (65, 47720), (70, 47663),

Gene: PP\_04 Start: 1143, Stop: 901, Start Num: 29

Candidate Starts for PP\_04:

(Start: 29 @1143 has 1 MA's), (Start: 36 @1104 has 182 MA's), (44, 1074), (56, 1035), (59, 1026), (65, 966),

Gene: PSullivan\_87 Start: 49195, Stop: 48992, Start Num: 36

Candidate Starts for PSullivan\_87:

(13, 49342), (15, 49330), (17, 49306), (Start: 36 @49195 has 182 MA's), (64, 49060), (70, 49000),

Gene: PacerPaul\_93 Start: 52361, Stop: 52158, Start Num: 36

Candidate Starts for PacerPaul\_93:  
(Start: 36 @52361 has 182 MA's),

Gene: Papez\_93 Start: 51585, Stop: 51337, Start Num: 24  
Candidate Starts for Papez\_93:  
(Start: 24 @51585 has 3 MA's), (Start: 36 @51537 has 182 MA's), (64, 51405),

Gene: Paphu\_87 Start: 49638, Stop: 49841, Start Num: 36  
Candidate Starts for Paphu\_87:  
(Start: 36 @49638 has 182 MA's), (64, 49773),

Gene: Paraselene\_87 Start: 49509, Stop: 49715, Start Num: 36  
Candidate Starts for Paraselene\_87:  
(Start: 36 @49509 has 182 MA's), (64, 49647), (70, 49707),

Gene: Parliament\_90 Start: 52239, Stop: 52445, Start Num: 36  
Candidate Starts for Parliament\_90:  
(Start: 36 @52239 has 182 MA's), (64, 52377),

Gene: PascalRango\_92 Start: 52074, Stop: 51871, Start Num: 36  
Candidate Starts for PascalRango\_92:  
(Start: 23 @52125 has 7 MA's), (Start: 36 @52074 has 182 MA's),

Gene: PattyP\_92 Start: 51679, Stop: 51476, Start Num: 36  
Candidate Starts for PattyP\_92:  
(Start: 36 @51679 has 182 MA's), (64, 51544),

Gene: Payneful\_77 Start: 46347, Stop: 46144, Start Num: 36  
Candidate Starts for Payneful\_77:  
(Start: 36 @46347 has 182 MA's), (64, 46212),

Gene: PeaceMeal1\_81 Start: 47729, Stop: 47541, Start Num: 43  
Candidate Starts for PeaceMeal1\_81:  
(35, 47762), (Start: 43 @47729 has 9 MA's), (65, 47606),

Gene: Pelly\_94 Start: 53346, Stop: 53143, Start Num: 36  
Candidate Starts for Pelly\_94:  
(Start: 36 @53346 has 182 MA's), (64, 53211),

Gene: Pepe\_86 Start: 50134, Stop: 49931, Start Num: 36  
Candidate Starts for Pepe\_86:  
(Start: 36 @50134 has 182 MA's), (64, 49999),

Gene: Perseus\_90 Start: 51769, Stop: 51975, Start Num: 36  
Candidate Starts for Perseus\_90:  
(Start: 36 @51769 has 182 MA's), (64, 51907),

Gene: Petersenfast\_83 Start: 46730, Stop: 46533, Start Num: 40  
Candidate Starts for Petersenfast\_83:  
(Start: 40 @46730 has 15 MA's), (65, 46601), (70, 46544),

Gene: Peterson\_90 Start: 51816, Stop: 51607, Start Num: 36  
Candidate Starts for Peterson\_90:

(4, 52101), (5, 52062), (6, 52059), (8, 52044), (11, 51996), (12, 51975), (14, 51960), (19, 51915), (20, 51909), (21, 51903), (Start: 36 @51816 has 182 MA's), (44, 51783), (63, 51711), (70, 51615),

Gene: Petp2012\_89 Start: 51326, Stop: 51123, Start Num: 36  
Candidate Starts for Petp2012\_89:  
(Start: 36 @51326 has 182 MA's), (64, 51191),

Gene: Petruchio\_88 Start: 48718, Stop: 48515, Start Num: 36  
Candidate Starts for Petruchio\_88:  
(Start: 36 @48718 has 182 MA's), (64, 48583), (70, 48523),

Gene: PhineBark\_85 Start: 49455, Stop: 49658, Start Num: 36  
Candidate Starts for PhineBark\_85:  
(Start: 36 @49455 has 182 MA's), (64, 49590),

Gene: Phlippers\_89 Start: 51409, Stop: 51615, Start Num: 36  
Candidate Starts for Phlippers\_89:  
(Start: 36 @51409 has 182 MA's), (64, 51547), (70, 51607),

Gene: PhrostyMug\_94 Start: 52143, Stop: 52349, Start Num: 36  
Candidate Starts for PhrostyMug\_94:  
(Start: 36 @52143 has 182 MA's), (64, 52281),

Gene: Pinto\_87 Start: 50214, Stop: 50011, Start Num: 36  
Candidate Starts for Pinto\_87:  
(Start: 36 @50214 has 182 MA's),

Gene: Pippin\_93 Start: 50646, Stop: 50852, Start Num: 36  
Candidate Starts for Pippin\_93:  
(Start: 36 @50646 has 182 MA's), (64, 50784),

Gene: Pita2\_91 Start: 50691, Stop: 50488, Start Num: 36  
Candidate Starts for Pita2\_91:  
(13, 50838), (15, 50826), (17, 50802), (Start: 36 @50691 has 182 MA's), (64, 50556), (70, 50496),

Gene: Poompha\_81 Start: 47730, Stop: 47539, Start Num: 43  
Candidate Starts for Poompha\_81:  
(30, 47796), (Start: 43 @47730 has 9 MA's), (46, 47712), (57, 47673), (65, 47604),

Gene: Pound\_223 Start: 107829, Stop: 107617, Start Num: 34  
Candidate Starts for Pound\_223:  
(Start: 34 @107829 has 2 MA's), (41, 107808), (45, 107784), (49, 107775), (56, 107760), (63, 107724), (64, 107688), (65, 107685), (67, 107652), (68, 107637),

Gene: PowerRanger\_85 Start: 50934, Stop: 50731, Start Num: 36  
Candidate Starts for PowerRanger\_85:  
(Start: 36 @50934 has 182 MA's), (64, 50799),

Gene: ProMouse\_90 Start: 49279, Stop: 49485, Start Num: 36  
Candidate Starts for ProMouse\_90:  
(Start: 36 @49279 has 182 MA's), (64, 49417),

Gene: Puppet\_88 Start: 51713, Stop: 51510, Start Num: 36

Candidate Starts for Puppet\_88:  
(Start: 36 @51713 has 182 MA's), (64, 51578),

Gene: QTRlifeCrisis\_86 Start: 49246, Stop: 49043, Start Num: 36  
Candidate Starts for QTRlifeCrisis\_86:  
(Start: 23 @49297 has 7 MA's), (Start: 36 @49246 has 182 MA's), (64, 49111),

Gene: Rajelicia\_89 Start: 52457, Stop: 52257, Start Num: 36  
Candidate Starts for Rajelicia\_89:  
(Start: 36 @52457 has 182 MA's), (64, 52325),

Gene: RhynO\_72 Start: 44427, Stop: 44242, Start Num: 43  
Candidate Starts for RhynO\_72:  
(3, 44745), (10, 44655), (12, 44616), (31, 44472), (Start: 43 @44427 has 9 MA's), (47, 44406), (57, 44370), (65, 44307), (67, 44274),

Gene: Rhynn\_85 Start: 50726, Stop: 50926, Start Num: 36  
Candidate Starts for Rhynn\_85:  
(Start: 36 @50726 has 182 MA's),

Gene: RidgeCB\_89 Start: 49216, Stop: 49422, Start Num: 36  
Candidate Starts for RidgeCB\_89:  
(Start: 36 @49216 has 182 MA's), (64, 49354), (70, 49414),

Gene: Ringer\_90 Start: 51410, Stop: 51210, Start Num: 36  
Candidate Starts for Ringer\_90:  
(Start: 36 @51410 has 182 MA's), (64, 51278),

Gene: Rohr\_92 Start: 51968, Stop: 52177, Start Num: 36  
Candidate Starts for Rohr\_92:  
(Start: 36 @51968 has 182 MA's), (64, 52106),

Gene: Rowdy\_87 Start: 48813, Stop: 48628, Start Num: 43  
Candidate Starts for Rowdy\_87:  
(3, 49131), (10, 49041), (12, 49002), (31, 48858), (Start: 43 @48813 has 9 MA's), (47, 48792), (57, 48756), (65, 48693), (67, 48660),

Gene: Rubeus\_88 Start: 48657, Stop: 48454, Start Num: 36  
Candidate Starts for Rubeus\_88:  
(Start: 36 @48657 has 182 MA's), (64, 48522),

Gene: Rufus\_93 Start: 51974, Stop: 51771, Start Num: 36  
Candidate Starts for Rufus\_93:  
(Start: 36 @51974 has 182 MA's), (64, 51839),

Gene: Ruotula\_94 Start: 52218, Stop: 52015, Start Num: 36  
Candidate Starts for Ruotula\_94:  
(Start: 36 @52218 has 182 MA's), (64, 52083),

Gene: Rutherferd\_91 Start: 50676, Stop: 50882, Start Num: 36  
Candidate Starts for Rutherferd\_91:  
(Start: 36 @50676 has 182 MA's), (64, 50814), (70, 50874),

Gene: STLscum\_100 Start: 51894, Stop: 51691, Start Num: 36  
Candidate Starts for STLscum\_100:  
(Start: 36 @51894 has 182 MA's), (64, 51759),

Gene: Sagefire\_86 Start: 50112, Stop: 50318, Start Num: 36  
Candidate Starts for Sagefire\_86:  
(Start: 36 @50112 has 182 MA's), (64, 50250),

Gene: Sandaddy\_90 Start: 51546, Stop: 51343, Start Num: 36  
Candidate Starts for Sandaddy\_90:  
(Start: 36 @51546 has 182 MA's), (64, 51411),

Gene: Sanya\_81 Start: 50361, Stop: 50158, Start Num: 36  
Candidate Starts for Sanya\_81:  
(Start: 36 @50361 has 182 MA's), (64, 50226),

Gene: SarFire\_98 Start: 53353, Stop: 53099, Start Num: 23  
Candidate Starts for SarFire\_98:  
(Start: 23 @53353 has 7 MA's), (Start: 36 @53302 has 182 MA's), (64, 53167),

Gene: Scowl\_90 Start: 50695, Stop: 50898, Start Num: 36  
Candidate Starts for Scowl\_90:  
(Start: 36 @50695 has 182 MA's), (64, 50827),

Gene: Seabiscuit\_95 Start: 51387, Stop: 51184, Start Num: 36  
Candidate Starts for Seabiscuit\_95:  
(Start: 36 @51387 has 182 MA's),

Gene: Seanderson\_89 Start: 52624, Stop: 52421, Start Num: 36  
Candidate Starts for Seanderson\_89:  
(Start: 36 @52624 has 182 MA's), (64, 52489),

Gene: Severus\_82 Start: 47724, Stop: 47536, Start Num: 43  
Candidate Starts for Severus\_82:  
(35, 47757), (Start: 43 @47724 has 9 MA's), (65, 47601),

Gene: Shapes\_87 Start: 48813, Stop: 48628, Start Num: 43  
Candidate Starts for Shapes\_87:  
(3, 49131), (10, 49041), (12, 49002), (31, 48858), (Start: 43 @48813 has 9 MA's), (47, 48792), (57, 48756), (65, 48693), (67, 48660),

Gene: ShortQueendom\_80 Start: 48241, Stop: 48038, Start Num: 36  
Candidate Starts for ShortQueendom\_80:  
(26, 48289), (Start: 36 @48241 has 182 MA's), (64, 48106),

Gene: Sibs6\_95 Start: 49833, Stop: 49630, Start Num: 36  
Candidate Starts for Sibs6\_95:  
(Start: 36 @49833 has 182 MA's), (64, 49698),

Gene: SkiPole\_98 Start: 51505, Stop: 51711, Start Num: 36  
Candidate Starts for SkiPole\_98:  
(Start: 36 @51505 has 182 MA's), (64, 51643), (70, 51703),

Gene: Slagathor\_92 Start: 51592, Stop: 51389, Start Num: 36  
Candidate Starts for Slagathor\_92:  
(Start: 36 @51592 has 182 MA's),

Gene: Smairt\_97 Start: 53160, Stop: 53366, Start Num: 36  
Candidate Starts for Smairt\_97:  
(Start: 36 @53160 has 182 MA's), (64, 53298),

Gene: Smeagol\_90 Start: 52545, Stop: 52336, Start Num: 36  
Candidate Starts for Smeagol\_90:  
(11, 52725), (12, 52704), (14, 52689), (19, 52644), (20, 52638), (21, 52632), (Start: 36 @52545 has 182 MA's), (44, 52512), (63, 52440), (70, 52344),

Gene: Snape\_89 Start: 47838, Stop: 47641, Start Num: 40  
Candidate Starts for Snape\_89:  
(Start: 40 @47838 has 15 MA's), (65, 47709), (70, 47652),

Gene: Snazzy\_92 Start: 51835, Stop: 51632, Start Num: 36  
Candidate Starts for Snazzy\_92:  
(Start: 36 @51835 has 182 MA's), (64, 51700),

Gene: Solon\_83 Start: 47822, Stop: 48028, Start Num: 36  
Candidate Starts for Solon\_83:  
(Start: 36 @47822 has 182 MA's), (64, 47960), (70, 48020),

Gene: Sorpresa\_93 Start: 51552, Stop: 51349, Start Num: 36  
Candidate Starts for Sorpresa\_93:  
(Start: 36 @51552 has 182 MA's), (64, 51417),

Gene: SpikeBT\_87 Start: 49792, Stop: 49589, Start Num: 36  
Candidate Starts for SpikeBT\_87:  
(Start: 36 @49792 has 182 MA's), (64, 49657),

Gene: Squee\_92 Start: 51943, Stop: 51740, Start Num: 36  
Candidate Starts for Squee\_92:  
(Start: 36 @51943 has 182 MA's), (64, 51808),

Gene: StewieG\_86 Start: 47748, Stop: 47954, Start Num: 36  
Candidate Starts for StewieG\_86:  
(Start: 36 @47748 has 182 MA's), (64, 47886), (70, 47946),

Gene: StrongArm\_88 Start: 50693, Stop: 50899, Start Num: 36  
Candidate Starts for StrongArm\_88:  
(Start: 36 @50693 has 182 MA's), (64, 50831),

Gene: Sumter\_87 Start: 51154, Stop: 51363, Start Num: 36  
Candidate Starts for Sumter\_87:  
(Start: 36 @51154 has 182 MA's), (64, 51292),

Gene: Sunshine924\_93 Start: 49690, Stop: 49896, Start Num: 36  
Candidate Starts for Sunshine924\_93:  
(Start: 36 @49690 has 182 MA's), (64, 49828), (70, 49888),

Gene: SwissCheese\_95 Start: 51439, Stop: 51236, Start Num: 36  
Candidate Starts for SwissCheese\_95:  
(Start: 36 @51439 has 182 MA's), (64, 51304),

Gene: Switzer\_91 Start: 51956, Stop: 51702, Start Num: 23  
Candidate Starts for Switzer\_91:  
(Start: 23 @51956 has 7 MA's), (Start: 36 @51905 has 182 MA's),

Gene: Swole\_91 Start: 50909, Stop: 50706, Start Num: 36  
Candidate Starts for Swole\_91:  
(13, 51056), (15, 51044), (17, 51020), (Start: 36 @50909 has 182 MA's), (64, 50774), (70, 50714),

Gene: Target\_90 Start: 48713, Stop: 48510, Start Num: 36  
Candidate Starts for Target\_90:  
(Start: 36 @48713 has 182 MA's), (64, 48578), (70, 48518),

Gene: Tasp14\_87 Start: 49921, Stop: 50127, Start Num: 36  
Candidate Starts for Tasp14\_87:  
(Start: 36 @49921 has 182 MA's), (64, 50059),

Gene: Teodoridan\_93 Start: 50495, Stop: 50698, Start Num: 36  
Candidate Starts for Teodoridan\_93:  
(Start: 36 @50495 has 182 MA's), (64, 50630),

Gene: TheloniousMonk\_90 Start: 51663, Stop: 51460, Start Num: 36  
Candidate Starts for TheloniousMonk\_90:  
(Start: 36 @51663 has 182 MA's), (64, 51528),

Gene: Thor\_98 Start: 52711, Stop: 52457, Start Num: 23  
Candidate Starts for Thor\_98:  
(Start: 23 @52711 has 7 MA's), (Start: 36 @52660 has 182 MA's), (64, 52525),

Gene: Timothy\_89 Start: 47815, Stop: 47618, Start Num: 40  
Candidate Starts for Timothy\_89:  
(Start: 40 @47815 has 15 MA's), (65, 47686), (70, 47629),

Gene: TinyTimmy\_87 Start: 47544, Stop: 47347, Start Num: 40  
Candidate Starts for TinyTimmy\_87:  
(Start: 40 @47544 has 15 MA's), (65, 47415), (70, 47358),

Gene: Topgun\_89 Start: 49318, Stop: 49524, Start Num: 36  
Candidate Starts for Topgun\_89:  
(Start: 36 @49318 has 182 MA's), (64, 49456), (70, 49516),

Gene: Tote\_86 Start: 48177, Stop: 47974, Start Num: 36  
Candidate Starts for Tote\_86:  
(13, 48324), (15, 48312), (17, 48288), (Start: 36 @48177 has 182 MA's), (64, 48042), (70, 47982),

Gene: Traft412\_86 Start: 50830, Stop: 50627, Start Num: 36  
Candidate Starts for Traft412\_86:  
(Start: 36 @50830 has 182 MA's), (64, 50695),

Gene: Treddle\_90 Start: 51379, Stop: 51582, Start Num: 36

Candidate Starts for Treddle\_90:  
(Start: 36 @51379 has 182 MA's), (64, 51514), (70, 51574),

Gene: Tripl3t\_91 Start: 53185, Stop: 52982, Start Num: 36  
Candidate Starts for Tripl3t\_91:  
(Start: 36 @53185 has 182 MA's), (64, 53050),

Gene: Trouble\_90 Start: 50598, Stop: 50804, Start Num: 36  
Candidate Starts for Trouble\_90:  
(Start: 36 @50598 has 182 MA's), (64, 50736),

Gene: TwoPeat\_88 Start: 50371, Stop: 50168, Start Num: 36  
Candidate Starts for TwoPeat\_88:  
(13, 50518), (15, 50506), (17, 50482), (Start: 36 @50371 has 182 MA's), (64, 50236), (70, 50176),

Gene: Violet\_87 Start: 50920, Stop: 51123, Start Num: 36  
Candidate Starts for Violet\_87:  
(Start: 36 @50920 has 182 MA's), (64, 51055), (70, 51115),

Gene: Watermelon\_89 Start: 50581, Stop: 50378, Start Num: 36  
Candidate Starts for Watermelon\_89:  
(Start: 36 @50581 has 182 MA's), (64, 50446),

Gene: Wheeler\_96 Start: 53218, Stop: 53015, Start Num: 36  
Candidate Starts for Wheeler\_96:  
(Start: 36 @53218 has 182 MA's), (64, 53083),

Gene: Whitspit\_82 Start: 48679, Stop: 48476, Start Num: 36  
Candidate Starts for Whitspit\_82:  
(Start: 36 @48679 has 182 MA's), (64, 48544),

Gene: Wilkins\_90 Start: 49248, Stop: 49454, Start Num: 36  
Candidate Starts for Wilkins\_90:  
(Start: 36 @49248 has 182 MA's), (64, 49386), (70, 49446),

Gene: Zephyr\_92 Start: 51932, Stop: 51723, Start Num: 36  
Candidate Starts for Zephyr\_92:  
(Start: 36 @51932 has 182 MA's), (64, 51791),